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ABSTRACT

This report presents findings from the national research and reporting program, Monitoring the Future: A Continuing Study of the Lifestyle and Values of Youth, and is the sixth in an annual series reporting the drug use and related attitudes of high school seniors; the report covers the high school classes of 1975-1982. Two of the major topics covered are the current prevalence of drug use, and trends in use since 1975. Also reported are statistical data on grade of first use, trends in use at earlier grade levels, intensity of drug use, attitudes and beliefs among students concerning various types of drug use, and their perceptions of certain relevant aspects of the social environment. The eleven separate classes of drugs distinguished are marijuana (including hashish), inhalants, hallucinogens, cocaine, heroin, natural and synthetic opiates, stimulants, sedatives, tranquilizers, alcohol and cigarettes. Most of the information deals with illicit drug use. A special section discusses the use of non-prescription stimulants, including diet pills, stay-awake pills, and the look-alike pseudo-amphetamines. Results of the survey of seniors from approximately 125-140 public and private high schools throughout the United States showed that although about two-thirds of all American students try an illicit drug before they finish high school, the use of many illegal drugs as well as cigarettes is declining. About 1 in 16 students drinks alcohol daily and 41% had had five or more drinks in a row at least once in the 2 weeks prior to the survey. These levels of substance use and abuse probably reflect the highest level of illicit drug use in the industrialized world. (JAC)

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STUDENT DRUG USE, ATTITUDES, AND BELIEFS

National Trends 1975-1982

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INTRODUCTION

This report presents findings from a national research and reporting program being conducted by The University of Michigan's Institute for Social Research. That program, entitled Monitoring the Future: A Continuing Study of the Lifestyles and Values of Youth, is funded primarily by the National Institute on Drug Abuse.

The present document is the sixth in an annual series reporting the drug use and related attitudes of high school seniors in the United States. This report covers the high school classes of 1975 through 1982.

A series of larger, less frequently published volumes from the study is also available from the National Institute on Drug Abuse; the latest is Student Drug Use in America: 1975-1981. In addition to presenting a full chapter of detailed findings for each of the various classes of drugs, the larger volume contains chapters on attitudes and beliefs about drugs and various relevant aspects of the social milieu as well as several appendices dealing with validity, sampling error estimation, and survey instrumentation. *

Content Covered in this Report

Two of the major topics to be treated here are the current prevalence of drug use among American high school seniors, and trends in use since 1975. Also reported are data on grade of first use, trends in use at earlier grade levels, intensity of drug use, attitudes and beliefs among seniors concerning various types of drug use, and their perceptions of certain relevant aspects of the social environment.

The eleven separate classes of drugs distinguished are marijuana (including hashish), inhalants, hallucinogens, cocaine. heroin, natural and synthetic opiates other than heroin, stimulants, sedatives, tranquilizers,

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*Those interested in obtaining a copy free of charge may write to the National Clearinghouse for Drug Abuse Information, National Institute on Drug Abuse, 5600 Fishers Lane, Rockville, Maryland 20857.

alcohol, and cigarettes. (This particular organization of drug use classes was chosen to heighten comparability with a parallel series of publications based on national household surveys on drug abuse.) Separate statistics are also presented here for several sub-classes of drugs: PCP and LSD (both hallucinogens), barbiturates and methaqualone (both sedatives) and the amyl and butyl nitrites (both inhalants). PCP and the nitrites were added to our measurement for the first time in 1979 because of increasing concern over their rising popularity and possibly deleterious effects; trend data are thus only available for them since 1979. Barbiturates and methaqualone, which constitute the two components of the "sedatives" class as used here, have been separately measured from the outset. They have been presented separately because their trend lines are substantially different.

Except for the findings on alcohol, cigarettes, and non-prescription stimulants, practically all of the information reported here deals with illicit drug use.* Respondents are asked to exclude any occasions on which they used any of the psychotherapeutic drugs under medical supervision. (Some data on the medically supervised use of such drugs are contained in the full 1977, 1978, and 1981 volumes.)

This year we have added a special section, under "Other Findings from the Study", dealing with the use of non-prescription stimulants, including diet pills, stay-awake pills, and the "look-alike" pseudo-amphetamines. Questions on these substances were placed in the 1982 survey both because the use of such substances appeared to be on the rise, and because their inappropriate inclusion by some respondents in their answers about amphetamine use were affecting the observed trends.

The "Other Findings from the Study" section also presents the results from a new set of questions on the use of marijuana at a daily or near-daily level. These questions were added to enable us to develop a more complete individual history of daily use over a period of years, and they reveal some very interesting facts about the frequent users of this drug.

We have chosen to focus considerable attention on drug use at the higher frequency levels rather than simply reporting proportions who have ever used various drugs. This is done to help differentiate levels of seriousness, or extent, of drug involvement. While we may yet lack any public consensus of what levels of use constitute "abuse," there is surely a consensus that higher levels of use are more likely to have detrimental effects for the user and society than are lower levels. We have also introduced indirect measures of dosage per occasion, by asking respondents the duration and intensity of the highs they usually experience with each type of drug.

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*Actually, purchase and use of the butyl nitrites remains legal and unregulated at the present time.

Purposes and Rationale for this Research

Perhaps no area is more clearly appropriate for the application of systematic research and reporting than the drug field, given its rapid rate of change, its importance for the well-being of the nation, and the amount of legislative and administrative intervention addressed to it. Young people are often at the leading edge of social change; and this has been particularly true in the case of drug use. The surge in illicit drug use during the last decade has proven to be primarily a youth phenomenon, with onset of use most likely to occur during adolescence. From one year to the next particular drugs rise or fall in popularity, and related problems occur for youth, for their families, for governmental agencies, and for society as a whole. This year's findings show that considerable change is continuing to take place.

One of the major purposes of the Monitoring the Future series is to develop an accurate picture of the current situation and of current trends. A reasonably accurate assessment of the basic size and contours of the problem of illicit drug use among young Americans is an important starting place for rational public debate and policymaking. In the absence of reliable prevalence data, substantial misconceptions can develop and resources can be misallocated. In the absence of reliable data on trends, early detection and localization of emerging problems are more difficult, and assessments of the impact of major historical and policy-induced events are much more conjectural.

The Monitoring the Future study has a number of purposes other than prevalence and trend estimation—purposes which are not addressed in any detail in this volume. Among them are: gaining a better understanding of the lifestyles and value orientations associated with various patterns of drug use, and monitoring how those orientations are shifting over time; determining the immediate and more general aspects of the social environment which are associated with drug use and abuse; determining how drug use is affected by major transitions in social environment (such as entry into military service, civilian employment, college, unemployment) or in social roles (marriage, parenthood); distinguishing age effects from cohort and period effects in determining drug use; determining the effects of social legislation on all types of drug use; and determining the changing connotations of drug use and changing patterns of multiple drug use among youth. Readers interested in publications dealing with any of these other areas should write the authors at the Institute for Social Research, Rm. 2030, The University of Michigan, Ann Arbor, Michigan, 48109.

Research Design and Procedures

The basic research design involves data collections from high school seniors during the spring of each year, beginning with the class of 1975. Each data collection takes place in approximately 125 to 140 public and private high schools selected to provide an accurate cross section of high school seniors throughout the United States.

Reasons for Focusing on High School Seniors. There are several reasons for choosing the senior year of high school as an optimal point for monitoring the drug use and related attitudes of youth. First, the completion of high school represents the end of an important developmental stage in this society, since it demarcates both the end of universal public education and, for many, the end of living in the parental home. Therefore, it is a logical point at which to take stock of the cumulated influences of these two environments on American youth. Further, the completion of high school represents the jumping-off point from which young people diverge into widely differing social environments and experiences. Finally, there are some important practical advantages to building a system of data collections around samples of high school seniors. The need for systematically repeated, large-scale samples from which to make reliable estimates of change requires that considerable stress be laid on efficiency as well as feasibility. The last year of high school constitutes the final point at which a reasonably good national sample of an age-specific cohort can be drawn and studied economically.

One limitation in the design is that it does not include in the target population those young men and women who drop out of high school before graduation—between 15 and 20 percent of each age cohort. The omission of high school dropouts does introduce biases in the estimation of certain characteristics of the entire age group; however, for most purposes, the small proportion of dropouts sets outer limits on the bias. Further, since the bias from missing dropouts should remain just about constant from year to year, their omission should introduce little or no bias into the various types of change being estimated for the majority of the population.* Indeed, we believe the changes observed over time for those who finish high school are likely to parallel the changes for dropouts in most instances.

Sampling Procedures. A multi-stage procedure is used for securing a nationwide sample of high school seniors. Stage 1 is the selection of particular geographic areas, Stage 2 is the selection of one or more high schools in each area, and Stage 3 is the selection of seniors within each high school.

This three-stage sampling procedure yielded the following numbers of participating schools and students:

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*An examination of U. S. Census data shows that the proportion of all American 16 to 24 year olds who are not high school graduates, nor actively enrolled in school, remained virtually constant (at about 15% between 1970 and 1980. (Bureau of the Census, "School Enrollment—Social and Economic Characteristics of Students," Series P-20, various years).

	Class of 1975	Class of 1976	Class of 1977	Class of 1978	Class of 1979	Class of 1980	Class of 1981	Class of 1982
Number of public schools	111	108	108	111	111	107	109	116
Number of private schools	14	15	16	20	20	20	19	21
Total number of schools	125	123	124	131	131	127	128	137
Total number of students	15,791	16,678	18,436	18,924	16,662	16,524	18,267	18,661
Student response rate	78%	77%	79%	83%	82%	82%	81%	83%

Questionnaire Administration. About ten days before the administration students are given flyers explaining the study. The actual questionnaire administrations are conducted by the local Institute for Social Research representatives and their assistants, following standardized procedures detailed in a project instruction manual. The questionnaires are administered in classrooms during a normal class period whenever possible; however, circumstances in some schools require the use of larger group administrations.

Questionnaire Format. Because many questions are needed to cover all of the topic areas in the study, much of the questionnaire content is divided into five different questionnaire forms (which are distributed to participants in an ordered sequence that insures five virtually identical subsamples). About one-third of each questionnaire form consists of key or "core" variables which are common to all forms. All demographic variables, and nearly all of the drug use variables included in this report, are included in this "core" set of measures. Many of the questions dealing with attitudes, beliefs, and perceptions of relevant features of the social milieu are contained in only a single form, however, and are thus based on one-fifth as many cases (i.e., approximately 3,500 respondents).

Representativeness and Validity

School Participation. Schools are invited to participate in the study for a two-year period, and with only very few exceptions, each school in the original sample, after participating for one year of the study, has agreed to participate for a second year. Thus far, from 66 percent to 80 percent of the original schools invited to participate have agreed to do so each year; for each school refusal, a similar school (in terms of size, geographic area, urbanicity, etc.) is recruited as a replacement. The selection of replacement schools almost entirely removes problems of bias in region, urbanicity, and the like that might result from certain schools refusing to participate. Other potential biases are more subtle, however. If, for example, it turned out that most schools with "drug problems" refused to participate, that would seriously bias the sample. And if any other single factor were dominant in most refusals, that also might suggest a source of serious bias. In fact, however, the reasons for a school refusing to participate are varied and are often a function of

happenstance events; only a small proportion specifically object to the drug content of the survey. Thus we feel fairly confident that school refusals have not seriously biased the surveys.

Schools are selected in such a way that half of each year's sample is comprised of schools which participated the previous year, and half is comprised of schools which will participate the following year. We make use of this staggered half-sample feature of the design to check on possible biases in the year-to-year trend estimates derived from the full samples. Specifically, separate sets of one-year trends are computed using first that half sample of schools which participated in both 1975 and 1976, then the half-sample which participated in both 1976 and 1977, and so on. Thus, each one-year trend estimate derived in this way is based on a set of about 65 schools. When the resulting trend data (examined separately for each class of drugs) are compared with trends based on the total sample of schools, the results are highly similar, indicating that the trend estimates are little affected by turnover or shifting refusal rates in the school samples.

Student Participation. Completed questionnaires are obtained from 77% to 83% of all sampled students in participating schools each year. The single most important reason that students are missed is absence from class at the time of data collection; in most cases it is not workable to schedule a special follow-up data collection for absent students. Students with fairly high rates of absenteeism also report above-average rates of drug use; therefore, there is some degree of bias introduced into the prevalence estimates by our missing the absentees. Much of that bias could be corrected through the use of special weighting; however, we decided not to do so because the bias in overall drug use estimates was determined to be quite small, and because the necessary weighting procedures would have introduced undesirable complications (Appendix A of the full reports provides a discussion of this point). Of course, some students are not absent from class, but simply refuse when asked to complete a questionnaire. However, the proportion of explicit refusals amounts to only about 1 percent of the target sample.

Sampling Accuracy of the Estimates. For purposes of this introduction, it is sufficient to note that drug use estimates based on the total sample have confidence intervals that average about ±1% (as shown in Table 1, confidence intervals vary from ±2.2% to smaller than ±0.2%, depending on the drug). This means that had we been able to invite all schools and all seniors in the 48 coterminous states to participate, the results from such a massive survey should be within about one percentage point of our present findings for most drugs at least 95 times out of 100. We consider this to be a high level of accuracy, and one that permits the detection of fairly small changes from one year to the next.

Consistency and the Measurement of Trends. One other point is worth noting in a discussion of the validity of our findings. The Monitoring the Future project is, by intention, a study designed to be sensitive to

changes from one time to another. Accordingly, the measures and procedures have been standardized and applied consistently across each data collection. To the extent that any biases remain because of limits in school and/or student participation, and to the extent that there are distortions (lack of validity) in the responses of some students, it seems very likely that such problems will exist in much the same way from one year to the next. In other words, biases in the survey estimates will tend to be consistent from one year to another, which means that our measurement of trends should be affected very little by any such biases.

A Caution about the Stimulant Results

In reporting their psychotherapeutic drug use, respondents are instructed to exclude not only medically supervised use, but also any use of over-the-counter (i.e., non-prescription) drugs. However, in recent years some of those reporting stimulant (amphetamine) use have erroneously been including the use of over-the-counter stay-awake and diet pills, as well as other pills intentionally manufactured to look like amphetamines, and sold under names which sound like them, but which contain no controlled substances. (Legislative and enforcement efforts are now underway in many states to stop the manufacture and mail-order distribution of these latter "look-alike, sound-alike" pseudo-amphetamines.) The advertising and sales of over-the-counter diet pills (most of which contain the mild stimulant phenylpropanolamine, and some of which also contain caffeine) have burgeoned in recent years, as has also been true for the "sound-alike, look-alike" pills (most of which contain caffeine). We believe that the inappropriate inclusion of these non-controlled stimulants in the responses to our surveys accounts for much of the observed sharp rise in reported "amphetamine" use in 1980 and 1981. Therefore, the reader is advised to view the unadjusted amphetamine use statistics for those years with some caution.

In the 1982 survey, we introduced some new questions on the use of both controlled and non-controlled stimulants. (We also kept the old version of the question in two questionnaire forms so that it will be possible to "splice" the trend lines resulting from the old and new questions.) This year we include statistics on "amphetamines, adjusted"—which are based on these new questions. We think these have been successful at getting respondents to exclude over-the-counter stimulants and those "look-alike" stimulants which the user knows are look-alikes. However, as is true with several other drug classes, the user may at times be ingesting a substance other than the one he or she thinks it to be. Thus, some erroneous self-reports of "amphetamine" use may remain.

An upward bias from the inclusion of over-the-counter and look-alike stimulants affects not only the stimulant (amphetamine) trend statistics, but also trend statistics for the composite index entitled "use of any illicit drug other than marijuana." Since this index has been used consistently in this monograph series to compare important subgroups (such as those defined by sex, region, college plans, etc.) we have also included adjusted values based on calculations in which amphetamines have been excluded. In other words, the adjusted statistic reflects "use of any illicit drugs other than marijuana or amphetamines." These

adjusted values are included to show what happens when amphetamine use—and any upward biases in trends it might contain—is excluded from the trend statistics.

It is worth noting that the two classes of drug use which are not actually amphetamine use, but which may be inadvertently reported as amphetamine use, reflect two quite different types of behavior. Presumably users of over-the-counter diet and stay-awake pills are using them for functional reasons and not for recreational purposes. On the other hand, it seems likely that most users of the look-alike pseudo-amphetamines <u>are</u> using them for recreational purposes. (In fact, in many cases the user who purchased them on the street may think he or she has the real thing.) Thus, the inclusion of the look-alikes may have introduced a bias in the estimates of true amphetamine use, but not in the estimates of a class of behavior—namely, trying to use controlled stimulants for recreational purposes. Some would argue that the latter is the more important factor to be monitoring in any case.

OVERVIEW OF KEY FINDINGS

The results presented in this report are based on large, representative sample surveys of the last eight graduating classes enrolled in public and private high schools across the United States. The following key findings have been established:

- The most recent high school survey shows that American young people are continuing to gradually moderate their use of illicit drugs. Between 1981 and 1982 nearly all classes of illicit drugs showed declines in current use (that is, use during the month preceding the survey), with the most appreciable drops occurring this year for marijuana, cocaine, stimulants, and sedatives. Tranquilizer use and hallucinogen use also showed declines, though more modest ones, and opiates other than heroin also show some evidence of decline. The exceptions to this overall picture of declining use occurred for two of the less frequently used classes of drugs—heroin and inhalants—neither of which showed any appreciable change in 1982.

- Marijuana, by far the most widely used of the illicit drugs, has shown a pattern of consistent decline since 1979. While the proportion of seniors having ever tried the drug has not changed much (60% in 1979 vs. 59% in 1982), current use has dropped considerably—from 37% in 1979 to 29% in 1982. Of most importance, however, is the decrease in daily or near daily use (defined as use on twenty or more occasions in the past thirty days). Between 1975 (when this study began) and 1978, daily marijuana use climbed rapidly and steadily from 6% to 11% of all seniors. Since 1978, however, there has been just about as precipitous a fall in daily use, as young people's concerns about the consequences of regular use have grown and peer acceptance has fallen. (Some 60% now attribute great risk to regular marijuana use, up from 35% in 1978; and three-quarters now think their friends would

disapprove of such behavior.) This year, active daily use is back down to where it was in 1975, at 6%, or about one in every sixteen seniors.

- Annual prevalence (the proportion of respondents reporting any use in the prior year) of cocaine had more than doubled between 1975 and 1979, and had then levelled off between 1979 and 1981. This year for the first time use began to decline, with annual prevalence falling from 12.4% to 11.5% (It is of interest to note that the Western and Northeastern regions of the country have annual prevalence rates for cocaine which are roughly twice those of the South and North Central, yielding one of the greatest regional differences found for any drug.)

- Another drug which began to decline in popularity for the first time this year is methaqualone (a component of the sedatives class, along with barbiturates). This year's modest decline (annual prevalence fell from 7.6% to 6.8%) follows an increase in use between 1978 and 1980 and a levelling in 1981.

- Two other classes of controlled psychotherapeutic drugs—barbiturates and tranquilizers—also showed modest declines in non-medical use in 1982. For the tranquilizers this reflected the continuation of a fairly steady decline which began back in 1977, when annual prevalence stood at 10.8% (vs. 7.0% in 1982).

- Barbiturates (a major class of sedatives) also have shown a long-term steady decline which continued in 1982. Annual prevalence, which stood at 10.7% in 1975, is now down to 5.5%.

- The use of PCP has dropped dramatically since it was first measured in this study in 1979. Annual prevalence has fallen from 7.0% in 1979 to 2.2% in 1982. (This year's decline was 1.0%.) The use of LSD, on the other hand, has remained fairly steady since around 1977 (following a decline in earlier years), although even LSD use appears to have dropped slightly this year. Annual prevalence stands at 6.1%.

- The use of the amyl and butyl nitrites (inhalants known by such street names as "poppers", "snappers", Locker Room and Rush) declined appreciably between 1979, when they were first measured, and 1981. (Annual prevalence dropped from 6.5% to 3.7% in that interval.) However, there was no significant change observed this year. Total inhalant use (corrected for known underreporting of the nitrite inhalants) has

shown a similar pattern of change. Annual prevalence stands at 6.6% in 1982 for this class of drugs, down from a high of 9.2% in 1979.

- The prevalence of reported heroin use dropped by one half between 1975 and 1979. Annual prevalence, for example, fell from 1.0% to 0.5%. But since 1979, heroin use levels have remained stable. (It should be noted that the reported prevalence levels for heroin are likely to be underestimates due to the extremely illicit nature of this drug.) The use of opiates other than heroin has remained quite constant since the study began in 1975, although there is some evidence in the last year or two of a gradual downturn beginning. Annual prevalence was 6.3% in 1980 and 5.3% in 1982.

- Stimulants, the second most widely used class of illicit drugs, have been showing a different pattern of change than most other drugs. Stimulant use was fairly steady between 1975 and 1979 and then it rose rapidly for two years (lifetime prevalence went from 24% in 1979 to 32% in 1981) while most other drugs were starting to fall in popularity.

  Even though the questions asked specifically about the use of amphetamines, which are prescription-controlled substances, we attributed much of this increase in reported stimulant use to the aggressive marketing of nonprescription over-the-counter pharmaceuticals (e.g., diet pills and stay-awake pills) and "look alike" stimulants (those manufactured to look like an actual amphetamine and promoted by mail-order to the youth market). While respondents were not supposed to include the use of such substances in their answers about amphetamine use, we know that a number did (see the last section of this report), and that this exaggerated the observed increase in reported amphetamine use. In any case, the number of students reporting using any stimulants in the month preceding the survey dropped significantly in 1982, from 16% to 14%. (Annual prevalence remained unchanged and lifetime prevalence actually increased to 36%, indicating that more seniors have had experience with such drugs than ever before, even though active use has dropped.)

  Part or all of that decrease very likely reflects some decline in the use of non-prescription stimulants, particularly since most states recently outlawed the sale and distribution of the "look alikes". As is discussed in the last section of this report, newly formulated questions were used for the first time this year to measure amphetamine use uncontaminated

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with the use of the non-prescription stimulants. These questions yielded 1982 amphetamine prevalence levels which were lower then those generated by the unrevised questions in 1982, indicating that some respondents had, indeed, been including non-prescription stimulants in their answers. But the results from even the revised questions in 1982 are higher than those from the unrevised questions in all years prior to 1981. Thus it appears that there was indeed an increase in the use of amphetamines up through 1981—or at least in the use of what the respondents believe to be real amphetamines. It seems quite possible, though, that there was a subsequent decrease in amphetamine use in 1982, given the general downward trends in most other drugs and the decline in the active use of stimulants as measured by the unadjusted question version. Nevertheless, this decline cannot be empirically documented until next year.

- The revised questions on amphetamine use indicate that, while the unrevised questions overestimate true amphetamine use to a moderate degree, the revised prevalence levels are still very high: lifetime prevalence is 28%, annual is 20%, monthly 11%, and daily 0.7%. (This compares with the unrevised estimates of 36%, 26%, 14% and 1.1% respectively.)

- The prevalence of the several classes of non-prescription stimulants can be estimated for the first time this year. (See the last section of this report.) The look-alike pseudo-amphetamines, which were virtually non-existent a few years ago, have attained a fair-sized market in just a few years. Lifetime prevalence is 15%, monthly prevalence 6%, and daily prevalence 0.6%.

- Over-the-counter diet pills have been used by a sizeable proportion of seniors (30% lifetime prevalence and 10% in just the prior month). Use is particularly high among females: 42% lifetime prevalence, 14% in the last month, and 2.0% current daily use. (All other stimulants, including amphetamines, are used by roughly equal proportions of both sexes.)

- Stay-awake pills sold over-the-counter are used by fewer seniors: 19% lifetime prevalence, and 6% in the last month. While such pills may be used to stay awake for studying, the prevalence of their use is not higher among the college-bound, as might be expected. It is actually slightly lower than average in this group.

- The greater moderation by American young people in their use of illicit drugs may be found not only in the fact that fewer are using most types of drugs, but also in the fact that, even among the users of many of these classes, use appears to be less intense. For example, since 1975 there has been a drop in the degree and/or duration of the "highs" reported by users for marijuana, stimulants, cocaine, sedatives, and opiates other than heroin. To take another example, in 1976 65% of those who reported using marijuana in the prior year said they averaged less than one "joint" per day, versus 74% of such users in 1982. (Data not shown.)

- Turning to the two major licit drugs, alcohol use has remained relatively stable in this population since 1975, though at high levels. Nearly all young people have tried alcohol by the end of their senior year (93%) and the great majority (70%) have used in the prior month. Daily drinking is at exactly the same level in 1982 as it was in 1975 (5.7%), while the rate of occasional binge drinking is slightly higher (in 1975 37% said that on at least one occasion they had taken five or more drinks in a row during the prior two weeks, vs. 41% of the 1982 seniors). There is some evidence over the last year or two that there actually may be some very gradual diminution in alcohol use, though it is still too early to say for certain.

- Last year we reported that the dramatic decline is cigarette use which occurred in this age group between 1977 and 1980 appeared to be decelerating. (Daily smoking had dropped from 29% to 20% between 1977 and 1981 and daily use of half-a-pack a day or more had fallen from 19.4% to 13.5%.) This year that decline has halted and perhaps even reversed slightly—daily use rose 1%, though this is not a statistically significant change. The earlier decline in use had important implications for the long-term health of this generation, and any reversal of that decline would likewise be of considerable importance.

  As with marijuana, it appears that the rather large drop in daily smoking rates was in response to both personal concerns about the health consequences of use and perceived peer disapproval of use, both of which rose steadily until last year. Slightly fewer males than females are regular smokers (13.1% of the males smoke half-a-pack a day vs. 14.7% of the females), but the sex difference is larger if occasional smoking is included. A far greater difference, however, is associated with college plans: only 8% of the college-bound smoke half-a-pack or more daily compared with 21% of the non-college-bound.

- In sum, the use of many illicit drugs has declined, or is declining, significantly from the peak levels attained during the late seventies. In addition, cigarette use has declined substantially, although that decline has now ended.

  Despite this generally good news about the direction in which things have been moving, it would be a disservice to leave the impression that the drug abuse problem among American youth is anywhere close to being solved. It is still true that:

  Roughly two-thirds of all American young people (66%) try an illicit drug before they finish high school.

  Over one-third have illicitly used drugs other than marijuana.

  At least one in every sixteen high school seniors is actively smoking marijuana on a daily basis, and fully 20% have done so for at least a month at some time in their lives.

  About one in sixteen is drinking alcohol daily; and 41% have had five or more drinks in a row at least once in the past two weeks.

  Some 30% have smoked cigarettes in the prior month, a substantial proportion of whom are, or soon will be, daily smokers.

- These are truly alarming levels of substance use and abuse, whether by historical standards or in comparison with other countries. In fact, they still probably reflect the highest levels of illicit drug use to be found in any nation in the industrialized world.

PREVALENCE OF DRUG USE

This section summarizes the levels of drug use reported by the class of 1982. Data are included for lifetime use, use during the past year, use during the past month, and daily use. There is also a comparison of key subgroups in the population (based on sex, college plans, region of the country, and population density or urbanicity).

Because we think that the revised questions on amphetamine use, introduced for the first time this year, give a more accurate picture of the actual use of that controlled substance, all references to prevalence rates in this section will be based on that revised version (including references to proportions using "any illicit drug" or "any illicit drug other than marijuana"). We call the reader's attention to this fact, since it represents a change from our standard practice in previous volumes.

Prevalence of Drug Use in 1982: All Seniors

Lifetime, Monthly, and Annual Prevalence

- Nearly two-thirds of all seniors (64%) report illicit drug use (adjusted for overreporting of amphetamines) at some time in their lives. However, a substantial proportion of them have used only marijuana (23% of the sample or 36% of all illicit users).

- More than four in every ten seniors (41%) report using an illicit drug other than marijuana (adjusted) at some time.*

- Figure A gives a ranking of the various drug classes on the basis of their lifetime prevalence figures.

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*Use of "other illicit drugs" includes any use of hallucinogens, cocaine, or heroin or any use of other opiates, stimulants, sedatives, or tranquilizers which is not under a doctor's orders.

TABLE I

Prevalence (Percent Ever Used) of Sixteen Types of Drugs: Observed Estimates and 95% Confidence Limits (1982)
(N = 17500)

	Lower limit	Observed estimate	Upper limit
Marijuana/Hashish	56.5	58.7	60.9
Inhalants[a]	11.8	12.8	13.8
Inhalants Adjusted[b]	*16.9*	*18.0*	*19.1*
Amyl & Butyl Nitrites[c]	8.6	9.8	11.2
Hallucinogens	11.5	12.5	13.6
Hallucinogens Adjusted[d]	*14.0*	*15.0*	*16.0*
LSD	8.6	9.6	10.7
PCP[c]	4.8	6.0	7.4
Cocaine	14.8	16.0	17.3
Heroin	1.0	1.2	1.5
Other opiates[e]	8.8	9.6	10.5
Stimulants Adjusted[e,f]	*26.3*	*27.9*	*29.6*
Sedatives[e]	14.0	15.2	16.5
Barbiturates[e]	9.3	10.3	11.4
Methaqualone[e]	9.7	10.7	11.8
Tranquilizers[e]	12.8	14.0	15.3
Alcohol	91.6	92.8	93.8
Cigarettes	68.4	70.1	71.7

[a] Data based on four forms. N is four-fifths of N indicated.

[b] Adjusted for underreporting of amyl and butyl nitrites. See text for details.

[c] Data based on a single questionnaire form. N is one-fifth of N indicated.

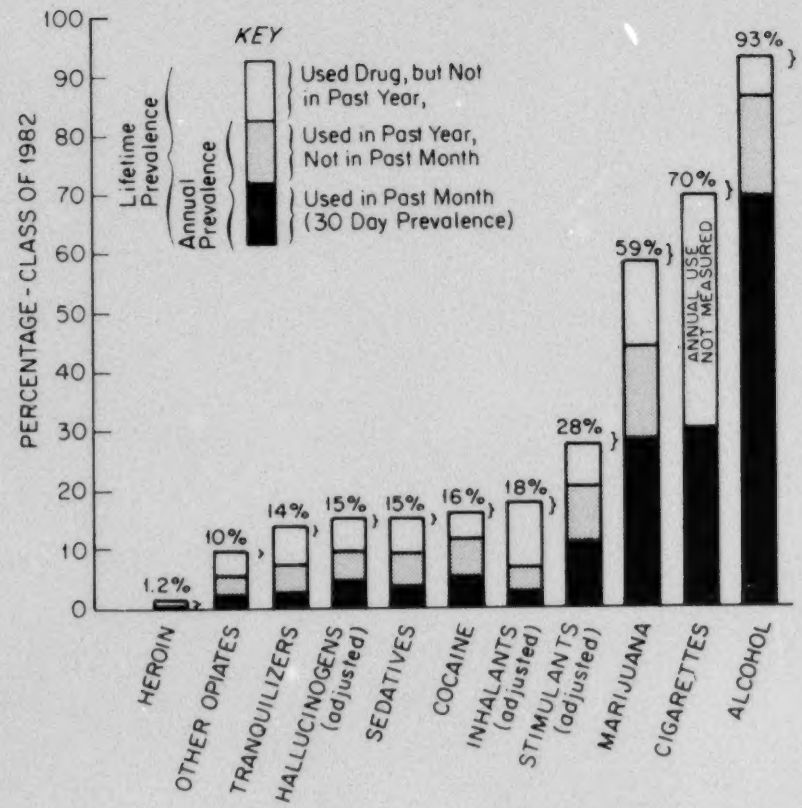
[d] Adjusted for underreporting of PCP. See text for details.

[e] Only drug use which was not under a doctor's orders is included here.

[f] Adjusted for overreporting of non-prescription stimulants. Data based on three questionnaire forms. N is three-fifths of N indicated.

FIGURE A

Prevalence and Recency of Use
Eleven Types of Drugs, Class of 1982



NOTES: The bracket near the top of a bar indicates the lower and upper limits of the 95% confidence interval.

- Marijuana is by far the most widely used illicit drug with 59% reporting some use in their lifetime, 44% reporting some use in the past year, and 29% reporting some use in the past month.

- The most widely used class of other illicit drugs is stimulants (28% lifetime prevalence).* Next come inhalants (adjusted) at 18% and cocaine at 16%. These are followed closely by sedatives at 15%, hallucinogens (adjusted) at 15%, and tranquilizers at 14%.**

- The inhalant estimates have been adjusted upward because we observed that not all users of one subclass of inhalants—amyl and butyl nitrites (described below)—report themselves as inhalant users. Because we included questions specifically about nitrite use for the first time in one 1979 questionnaire form, we were able to discover this problem and make estimates of the degree to which inhalant use was being underreported in the overall estimates. As a result, all prevalence estimates for inhalants have been increased, with the proportional increase being greater for the more recent time intervals (i.e., last month, last year) because use of the other common inhalants, such as glue and aerosols, is more likely to have been discontinued prior to senior year.

- The specific classes of inhalants known as amyl and butyl nitrites, which are sold legally and go by the street names of "poppers" or "snappers" and such brand names as Locker Room and Rush, have been tried by one in every ten seniors (10%).

- We also discovered in 1979, by adding questions specifically about PCP use, that some users of the hallucinogenic drug PCP do not report themselves as users of hallucinogens—even though PCP is explicitly included as an example in the questions about hallucinogens. Thus, since 1979 the hallucinogen prevalence and trend estimates have been adjusted upward to correct for this known underreporting.***

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*Only use which was not medically supervised is included in the figures cited in this chapter.

**See caution at the end of the introductory section concerning the interpretation of stimulant statistics.

***Because the data to adjust inhalant and hallucinogen use are available from only a single questionnaire form in a given year, the original uncorrected variables will be used in most analyses. We believe relational analyses will be least affected by these underestimates, and that the most serious impact is on prevalence estimates, which from now on will be adjusted appropriately.

TABLE 2

Prevalence (Percent Ever Used) and Recency of Use of Sixteen Types of Drugs (1982)

(N = 17500)

	Ever used	Past month	Past year, not past month	Not past year	Never used
Marijuana/Hashish	58.7	28.5	15.8	14.4	41.3
Inhalants[a]	12.8	1.5	3.0	8.3	87.2
Inhalants Adjusted[b]	*18.0*	*2.5*	*4.1*	*11.4*	*82.0*
Amyl & Butyl Nitrites[c]	9.8	1.1	2.5	6.2	90.2
Hallucinogens	12.5	3.4	4.7	4.4	87.5
Hallucinogens Adjusted[d]	*15.0*	*4.3*	*5.0*	*5.7*	*85.0*
LSD	9.6	2.4	3.7	3.5	90.4
PCP[c]	6.0	1.0	1.2	3.8	94.0
Cocaine	16.0	5.0	6.5	4.5	84.0
Heroin	1.2	0.2	0.4	0.6	98.8
Other opiates[e]	9.6	1.8	3.5	4.3	90.4
Stimulants Adjusted[e,f]	*27.9*	*10.7*	*9.6*	*7.6*	*72.1*
Sedatives[e]	15.2	3.4	5.7	6.1	84.8
Barbiturates[e]	10.3	2.0	3.5	4.8	89.7
Methaqualone[e]	10.7	2.4	4.4	3.9	89.3
Tranquilizers[e]	14.0	2.4	4.6	7.0	86.0
Alcohol	92.8	69.7	17.1	6.0	7.2
Cigarettes	70.1	30.0	(40.1)[g]		29.9

[a]Data based on four questionnaire forms. N is four-fifths of N indicated.

[b]Adjusted for underreporting of amyl and butyl nitrites (see text).

[c]Data based on a single questionnaire form. N is one-fifth of N indicated.

[d]Adjusted for underreporting of PCP (see text).

[e]Only drug use which was not under a doctor's orders is included here.

[f]Adjusted for overreporting of non-prescription stimulants. Data based on three questionnaire forms. N is three-fifths of N indicated.

[g]The combined total for the two columns is shown because the question asked did not discriminate between the two answer categories.

- Lifetime prevalence for the specific hallucinogenic drug PCP now stands at 6%, somewhat lower than that of the other most widely used hallucinogen, LSD (lifetime prevalence, 10%). Because PCP is showing a higher rate of discontinuation than LSD, there is an even greater proportional difference in their current usage rates.

- Opiates other than heroin have been used by one in ten seniors (10%).

- Only 1.2% of the sample admitted to ever using any heroin, the most infrequently used drug. But given the highly illicit nature of this drug, we deem it the most likely to be underreported.

- Within the general class "sedatives," the specific drug methaqualone has now been used by as many seniors (10.7%) as the other, much broader subclass of sedatives, barbiturates (10.3% lifetime prevalence).

- The illicit drug classes remain in roughly the same order when ranked by their prevalence in the most recent month and in the most recent year, as the data in Figure A illustrate. The only important change in ranking occurs for inhalants, because use of certain of them, like glues and aerosols, tends to be discontinued at a relatively early age.

- The drug classes with the highest rates of discontinuation of use are the inhalants adjusted (63% of previous users had not used in the past twelve months), the nitrite inhalants specifically (63% of users), the hallucinogen PCP (63%), and heroin and tranquilizers (both at 50%).

- Use of either of the two major licit drugs, alcohol and cigarettes, remains more widespread than use of any of the illicit drugs. Nearly all students have tried alcohol (93%) and the great majority (70%) have used it in the past month.

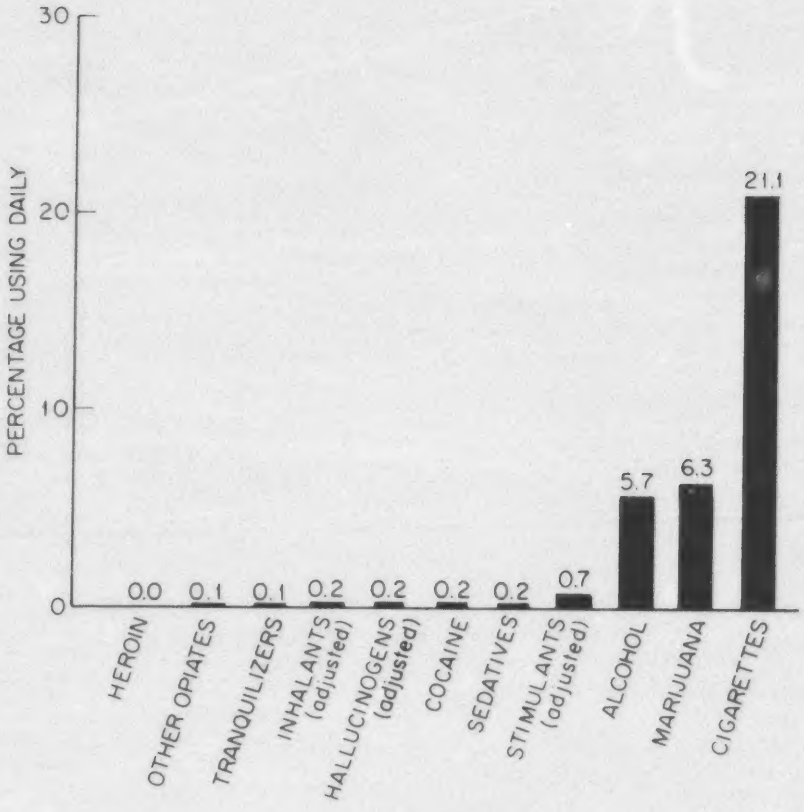
- Some 70% report having tried cigarettes at some time, and 30% smoked at least some in the past month.

Daily Prevalence

- Frequent use of these drugs is of greatest concern from a health and safety standpoint. Table 9 and Figure B show the prevalence of daily or near daily use of the various classes of drugs. For all drugs, except cigarettes, respondents are considered daily users if they indicate that they had used the drug on twenty or

FIGURE B

Thirty-Day Prevalence of Daily Use
Eleven Types of Drugs, Class of 1982



more occasions in the preceding 30 days. For cigarettes, they explicitly state use of one or more cigarettes per day.

- The displays show that cigarettes are used daily by more of the respondents (21%) than any of the other drug classes. In fact, 14.2% say they smoke half-a-pack or more per day.

- Another important fact is that marijuana is still used on a daily or near daily basis by a substantial fraction of the age group (6.3%). By comparison, 5.7% use alcohol that often.

- Less than 1% of the respondents report daily use of any one of the illicit drugs other than marijuana. Still, 0.7% report unsupervised daily use of amphetamines. (See discussion at end of introductory section on stimulant statistics.) The next highest daily use figures are for cocaine, inhalants (adjusted), sedatives, and hallucinogens (adjusted), all at 0.2%. While very low, these figures are not inconsequential, given that 1% of each high school class represents over 30,000 individuals.

- Tranquilizers and opiates other than heroin are used daily by only about 0.1%.

- Virtually no respondents (less than 0.05%) report daily use of heroin in senior year. However, in the opinion of the investigators heroin is the drug most likely to be underreported in surveys, so this absolute prevalence figure may well be understated.

- While daily alcohol use stands at 5.7% for this age group, a substantially greater proportion report occasional heavy drinking. In fact, 41% state that on at least one occasion during the prior two-week interval they had five or more drinks in a row.

Prevalence Comparisons for Important Subgroups

Sex Differences

- In general, higher proportions of males than females are involved in drug use, especially heavy drug use; however, this picture is a complicated one (see Tables 3 through 5).

- Overall marijuana use is somewhat higher among males, and daily use of marijuana is about twice as frequent among males (8.2% vs. 4.0% for females, data not shown).

- Males also have considerably higher prevalence rates on most other illicit drugs. The annual prevalence (Table 4) for inhalants, hallucinogens, heroin, and the specific drugs PCP, LSD and the nitrites tend to be one and one-half to two times as high among males as among females. Males also report somewhat higher annual rates of use than females for cocaine, methaqualone, barbiturates, and opiates other than heroin. Further, males account for an even greater share of the frequent or heavy users of these various classes of drugs (data not shown).

- Tranquilizers are used by about equivalent proportions of both sexes.

- Only in the case of stimulants do the annual prevalence rates (as well as frequent usage patterns) for females exceed those for males—and then only by trivial amounts. Annual prevalence for stimulants (adjusted) is 20.3% for females vs. 19.6% for males. This reversal in sex differences is due to the fact that substantially more females than males use stimulants for purposes of weight loss—an instrumental, as opposed to recreational, use of the drug.

- Despite the fact that all but two of the individual classes of illicit drugs are used more by males than by females, the proportions of both sexes who report using some illicit drug other than marijuana (adjusted for overreporting of amphetamines) during the last year are not dramatically different (31% for males vs. 28% for females; see Figure D). Even if amphetamine use is excluded from the comparisons altogether, fairly comparable proportions of both sexes (24% for males vs. 20% for females) report using some illicit drug other than marijuana during the year. If one thinks of going beyond marijuana as an important threshold point in the sequence of illicit drug use, then nearly equal proportions of both sexes were willing to cross that threshold at least once during the year. However, on the average the female "users" take fewer types of drugs and use them with less frequency than their male counterparts.

- Frequent use of alcohol tends to be disproportionately concentrated among males. Daily use, for example, is reported by 7.7% of the males but by only 3.4% of the females. Also, males are more likely than females to drink large quantities of alcohol in a single sitting.

- Finally, for cigarettes, there is a slight sex difference in the prevalence of smoking a half-a-pack or more daily, this time with females showing the higher proportion of users. Of the females, 14.7% smoke this heavily versus 13.1% of the males. There is a larger

TABLE 3

Lifetime Prevalence of Use of Sixteen Types of Drugs by Subgroups, Class of 1982

	Marijuana	Inhalants [a]	Amyl/Butyl Nitrites	Hallucinogens [a]	LSD	PCP	Cocaine	Heroin	Other Opiates	Stimulants [b] (adjusted)	Sedatives	Barbiturates	Methaqualone	Tranquilizers	Alcohol	Cigarettes
All seniors	58.7	12.8	9.8	12.5	9.6	6.0	16.0	1.2	9.6	27.9	15.2	10.3	10.7	14.0	92.8	70.1
Sex:																
Male	61.5	15.3	12.4	14.4	11.3	7.3	18.0	1.4	10.6	26.8	16.0	10.7	11.8	13.8	93.4	67.8
Female	55.5	10.4	7.3	10.2	7.4	4.7	13.7	0.8	8.6	28.2	14.1	9.6	9.3	14.2	92.4	72.0
College Plans:																
None or under 4 yrs	63.8	14.7	10.7	15.0	11.8	7.8	18.1	1.5	11.4	32.8	18.6	13.2	13.2	16.2	93.7	75.9
Complete 4 yrs	54.0	11.4	9.1	9.7	7.1	4.7	13.4	0.8	8.1	22.9	11.9	7.6	8.2	12.4	92.4	64.7
Region:																
Northeast	64.6	14.6	11.2	15.8	11.0	8.9	21.8	1.3	10.6	29.0	15.6	10.6	11.1	14.1	96.3	71.2
North Central	59.8	11.7	10.1	14.5	11.6	5.1	13.3	1.2	9.9	31.5	14.6	9.7	10.5	13.0	95.1	74.1
South	51.1	11.9	9.5	7.6	6.4	5.1	10.0	1.1	7.5	23.9	16.3	11.0	11.8	14.7	89.4	68.1
West	61.7	13.7	7.4	12 9	9.5	5.2	23.8	0.9	12 0	26.9	13.4	9.4	8.4	14.6	89.1	64.1
Population Density:																
Large SMSA	64.0	12.5	10.1	16.4	11.1	8.5	22.0	1.4	10.1	28.5	15.9	10.0	11.9	13.3	94.3	70.2
Other SMSA	59.6	12.2	10.4	11.6	9.6	5.5	14.3	1.1	9.8	28.6	15.0	10.0	10.7	14.4	92.6	68.4
Non-SMSA	53.1	13.9	8.8	10.5	8.3	4.8	13.2	1.1	9.1	26.6	14.9	10.8	9.8	14.1	91.9	72.1

[a] Unadjusted for known underreporting of certain drugs. See page 18.

[b] Adjusted for overreporting of the non-prescription stimulants.

difference in proportions reporting any use during the past month: 33% of the females versus 27% of the males.

Differences Related to College Plans

- Overall, seniors who are expecting to complete four years of college (referred to here as the "college-bound") have lower rates of illicit drug use than those not expecting to do so (see Tables 3 through 5).

- Annual marijuana use is reported by 41% of the college-bound vs. 48% of the noncollege-bound.

- There is a substantial difference in the proportion of these two groups using any illicit drug(s) other than marijuana (adjusted). In 1982, 26% of the college-bound reported any such behavior in the prior year vs. 34% of the noncollege-bound. (If amphetamine use is excluded from these "other illicit drugs," this difference diminishes to 19% vs. 25%, respectively.)

- For most of the specific illicit drugs other than marijuana, annual prevalence is higher—sometimes substantially higher—among the noncollege-bound, as Table 4 illustrates.

- Frequent use of many of these illicit drugs shows even larger contrasts related to college plans. Daily marijuana use, for example, is more than twice as high among those not planning four years of college (8.6%) as among the college-bound (3.9%).

- Frequent alcohol use is also more prevalent among the noncollege-bound. For example, drinking on a daily basis is reported by 7.5% of the noncollege-bound vs. only 4.1% of the college-bound. On the other hand, there are practically no differences between these groups in lifetime, annual, or monthly prevalence.

- By far the largest difference in substance use between the college and noncollege-bound involves cigarette smoking. There is a dramatic difference here, with only 8% of the college-bound smoking a half-a-pack or more daily compared with 21% of the noncollege-bound.

Regional Differences

- There are now some fair-sized regional differences in rates of illicit drug use among high school seniors. The highest (adjusted) rate is in the Northeast, where 55%

TABLE 4

Annual Prevalence of Use of Sixteen Types of Drugs by Subgroups, Class of 1982

	Marijuana	Inhalants [a]	Amyl/Butyl Nitrites	Hallucinogens [a]	LSD	PCP	Cocaine	Heroin	Other Opiates	Stimulants [b] (adjusted)	Sedatives	Barbiturates	Methaqualone	Tranquilizers	Alcohol	Cigarettes [c]
All seniors	44.3	4.5	3.6	8.1	6.1	2.2	11.5	0.6	5.3	20.3	9.1	5.5	6.8	7.0	86.8	14.2
Sex:																
Male	47.2	5.8	5.0	9.6	7.4	2.8	13.1	0.8	6.0	19.6	10.0	5.9	7.5	6.9	88.5	13.1
Female	40.8	3.1	2.3	6.1	4.3	1.6	9.6	0.4	4.6	20.3	8.0	5.0	5.9	7.1	85.3	14.7
College Plans:																
None or under 4 yrs	48.2	4.9	3.7	9.5	7.5	2.9	12.5	0.7	6.1	23.7	11.4	7.4	8.4	8.0	87.8	21.0
Complete 4 yrs	40.6	4.1	3.5	6.2	4.3	1.8	9.9	0.4	4.6	16.8	7.0	3.8	5.1	6.3	86.4	7.8
Region:																
Northeast	50.9	6.2	4.6	11.4	8.0	3.6	16.9	0.9	5.6	21.5	9.5	5.6	7.2	7.8	92.3	15.6
North Central	45.6	3.6	2.8	9.1	7.3	1.5	9.0	0.5	5.5	24.1	8.9	5.4	6.5	6.2	90.7	17.3
South	36.7	3.8	3.7	4.6	3.9	2.3	6.3	0.5	4.5	16.4	10.3	6.3	7.8	7.4	80.7	13.3
West	45.5	4.4	3.2	7.8	4.8	1.6	17.9	0.3	6.2	18.7	6.5	3.9	4.5	6.4	81.9	7.1
Population Density:																
Large SMSA	50.4	5.5	3.8	10.9	7.3	3.0	17.2	0.7	5.2	21.6	9.5	5.3	7.2	7.0	89.4	15.9
Other SMSA	44.8	3.9	4.2	7.6	6.3	2.4	10.1	0.4	5.7	20.7	9.4	5.7	6.8	7.2	86.7	12.9
Non-SMSA	38.5	4.4	2.7	6.5	4.8	1.5	8.5	0.6	4.9	18.8	8.5	5.5	6.3	6.8	84.9	14.2

[a] Unadjusted for known underreporting of certain drugs. See page 18.

[b] Adjusted for overreporting of the non-prescription stimulants.

[c] Based on 30-day prevalence of a half-pack-a-day of cigarettes, or more. Annual prevalence is not available.

say they have used a drug illicitly in the past year, followed by the West with 52% and the North Central with 50%. The South is somewhat lower than the other regions with only 42% having used any illicit drug (see Figure H).

- There is also regional variation in terms of the percent using some illicit drug other than marijuana (adjusted) in the past year: 34% in the Northeast, 33% in the West, 31% in the North Central, vs. only 25% in the South. (The West comes out very high due in part to its unusual level of cocaine use. In fact, the regional differences in cocaine use have been among the largest observed.) If amphetamine use is excluded from "the use of illicit drugs other than marijuana," the rankings change slightly: 27% in the West, 26% in the Northeast, 20% in the North Central, and 18% in the South.

- As Table 4 illustrates, the Northeast shows the highest annual rate of use for many of the individual illicit substances—these include marijuana, inhalants, the nirtrites specifically, hallucinogens, LSD specifically, PCP specifically, and alcohol. The West shows the highest level of cocaine use, yet it has a below average prevalence for nearly all other drugs. (Marijuana and opiates other than heroin are the exceptions.) The South shows the lowest usage levels for marijuana, hallucinogens, cocaine, opiates other than heroin, and stimulants. Barbiturates and tranquilizers have roughly equal prevalence rates across all regions of the country. (All of these are replications of last year's findings).*

- Alcohol use tends to be somewhat lower in the South and West than it is in the Northeast and North Central—in particular, the rate of daily drinking and "binge" drinking.

- Again, one of the largest differences occurs for regular cigarette smoking. Smoking half-a-pack or more a day occurs most often in the North Central (17% of seniors) and the Northeast (16%), followed by the South (13%); the West is distinctly lower (7%). This general pattern of regional differences has been replicated fairly consistently since 1975, except that this year for the first time the North Central region is slightly higher than the Northeast.

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*The replicability of these findings (as well as those presented below for urbanicity) is mentioned here because findings related to region and urbanicity are more subject to sampling error than are findings related to sex, college plans, or other subgroup divisions which cut across all schools in the sample.

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TABLE 5

Thirty-Day Prevalence of Use of Sixteen Types of Drugs by Subgroups, Class of 1982

	Marijuana	Inhalants [a]	Amyl/Butyl Nitrites	Hallucinogens [a]	LSD	PCP	Cocaine	Heroin	Other Opiates	Stimulants [b] (adjusted)	Sedatives	Barbiturates	Methaqualone	Tranquilizers	Alcohol	Cigarettes
All seniors	28.5	1.5	1.1	3.4	2.4	1.0	5.0	0.2	1.8	10.7	3.4	2.0	2.4	2.4	69.7	30.0
Sex:																
Male	31.4	2.0	2.1	4.2	2.9	1.3	5.9	0.4	2.2	10.2	3.5	2.1	2.5	2.6	74.1	26.8
Female	24.9	1.1	0.2	2.2	1.6	0.7	3.8	0.1	1.5	10.6	3.1	1.8	2.0	2.2	65.4	32.6
College Plans:																
None or under 4 yrs	32.9	1.7	1.3	4.2	3.2	1.5	5.2	0.3	2.3	13.7	4.7	2.8	3.3	2.8	71.6	38.7
Complete 4 yrs	23.9	1.4	1.0	2.3	1.5	0.7	4.3	0.2	1.4	7.7	2.2	1.3	1.4	2.0	68.6	22.1
Region:																
Northeast	33.3	2.0	1.2	4.8	3.0	1.4	7.9	0.4	2.0	11.5	3.4	2.1	2.3	2.8	76.7	32.1
North Central	30.0	1.3	0.8	4.4	3.3	0.5	3.6	0.2	1.8	13.0	3.6	2.2	2.6	1.9	75.0	33.5
South	22.4	1.6	1.3	1.8	1.5	1.1	2.6	0.2	1.7	8.4	3.7	2.3	2.6	2.6	61.3	29.4
West	29.2	1.0	1.2	1.9	1.2	1.2	7.7	0.1	1.8	9.0	2.2	1.2	1.5	1.9	63.8	20.4
Population Density:																
Large SMSA	34.3	2.0	1.0	4.6	2.7	1.4	8.3	0.3	1.8	11.1	3.3	2.0	2.2	2.2	72.9	32.1
Other SMSA	28.3	1.3	1.4	2.9	2.3	1.0	4.3	0.3	2.0	10.6	3.5	2.1	2.5	2.4	69.3	27.8
Non-SMSA	23.8	1.4	0.8	2.8	2.1	0.8	3.1	0.2	1.6	10.4	3.3	2.0	2.3	2.5	67.6	31.2

[a] Unadjusted for known underreporting of certain drugs. See page 18.

[b] Adjusted for overreporting of the non-prescription stimulants.

Differences Related to Population Density

- Three levels of population density (or urbanicity) have been distinguished for analytical purposes: (1) Large SMSA's, which are the twelve largest Standard Metropolitan Statistical Areas in the 1980 Census; (2) Other SMSA's, which are the remaining Standard Metropolitan Statistical Areas; and (3) Non-SMSA's, which are sampling areas not designated as metropolitan.

- Overall illicit drug use is highest in the largest metropolitan areas (55% annual prevalence, adjusted), slightly lower in the other metropolitan areas (50%), and lowest in the nonmetropolitan areas (44%).

- The same ranking occurs for the use of illicit drugs other than marijuana: 34% annual prevalence (adjusted) in the largest cities, 30% in the other cities, and 27% in the nonmetropolitan areas. (With amphetamine use excluded, these numbers drop—to 27%, 22%, and 19%, respectively—but still remain in the same rank order.)

- For specific drugs, the largest absolute difference associated with urbanicity occurs for marijuana, which has an annual prevalence of 50% in the large cities but only 39% in the nonmetropolitan areas (Table 4).

- Cocaine also shows a strong urbanicity difference; there is almost twice as much use in the large metropolitan areas (17%) compared to the nonmetropolitan areas (9%). The same is true for PCP (3.0% vs. 1.5%). The use of LSD and the nitrites is also fairly strongly correlated with urbanicity.

- There is some tendency for other types of drug use to be associated positively with urbanicity; however, the relationships are not strong nor always consistent from one year to another.

RECENT TRENDS

This section summarizes trends in drug use, comparing the eight graduating classes of 1975 through 1982. As in the previous section, the outcomes discussed include measures of lifetime use, use during the past year, use during the past month, and daily use. Also, trends are compared among the key subgroups.

Trends in Prevalence 1975-1982: All Seniors

- The years 1978 and 1979 marked the crest of a long and dramatic rise in marijuana use among American high school students. As Tables 6 through 9 illustrate, annual and 30-day prevalence of marijuana use hardly changed at all between 1978 and 1979, following a steady rise in the preceding years. In 1980 both statistics dropped for the first time, and they have continued to decline in the two years since. Both are now 7% to 9% below their all-time highs. Lifetime prevalence, which had remained unchanged in 1980, finally began to drop in '81, though more gradually. As we discuss later, there have been some significant changes in the attitudes and beliefs these young people hold in relation to marijuana; these changes suggest that the downward shift in marijuana use is likely to continue.

- Of greater importance is the even sharper downward trend now occurring for daily marijuana use. Between 1975 and 1978 there was an almost two-fold increase in daily use. The proportion reporting daily use in the class of 1975 (6.0%) came as a surprise to many. That proportion then rose rapidly, so that by 1978 one in every nine high school seniors (10.7%) indicated that he or she used the drug on a daily or nearly daily basis (defined as use on 20 or more occasions in the last 30 days). In 1979 we reported that this rapid and troublesome increase had come to a halt, with a 0.4% drop occurring that year. By 1982 the daily usage rate dropped to 6.3%—about one in every sixteen

TABLE 6

Trends in Lifetime Prevalence of Sixteen Types of Drugs

	Percent ever used								
	Class of 1975	Class of 1976	Class of 1977	Class of 1978	Class of 1979	Class of 1980	Class of 1981	Class of 1982	'81-'82 change
Approx. N =	(9400)	(15400)	(17100)	(17800)	(15500)	(15900)	(17500)	(17700)	
Marijuana/Hashish	47.3	52.8	56.4	59.2	60.4	60.3	59.5	58.7	-0.8
Inhalants[a]	NA	10.3	11.1	12.0	12.7	11.9	12.3	12.8	+0.5
Inhalants Adjusted[b]	NA	NA	NA	NA	*18.7*	*17.6*	*17.4*	*18.0*	+0.6
Amyl & Butyl Nitrites[c]	NA	NA	NA	NA	11.1	11.1	10.1	9.8	-0.3
Hallucinogens	16.3	15.1	13.9	14.3	14.1	13.3	13.3	12.5	-0.8
Hallucinogens Adjusted[d]	NA	NA	NA	NA	*18.6*	*15.7*	*15.7*	*15.0*	-0.7
LSD	11.3	11.0	9.8	9.7	9.5	9.3	9.8	9.6	-0.2
PCP[c]	NA	NA	NA	NA	12.8	9.6	7.8	6.0	-1.8s
Cocaine	9.0	9.7	10.8	12.9	15.4	15.7	16.5	16.0	-0.5
Heroin	2.2	1.8	1.8	1.6	1.1	1.1	1.1	1.2	+0.1
Other opiates[e]	9.0	9.6	10.3	9.9	10.1	9.8	10.1	9.6	-0.5
Stimulants[e]	22.3	22.6	23.0	22.9	24.2	26.4	32.2	35.6	+3.4ss
Stimulants Adjusted[e,f]	NA	NA	NA	NA	NA	NA	NA	27.9	--
Sedatives[e]	18.2	17.7	17.4	16.0	14.6	14.9	16.0	15.2	-0.8
Barbiturates[e]	16.9	16.2	15.6	13.7	11.8	11.0	11.3	10.3	-1.0
Methaqualone[e]	8.1	7.8	8.5	7.9	8.3	9.5	10.6	10.7	+0.1
Tranquilizers[e]	17.0	16.8	18.0	17.0	16.3	15.2	14.7	14.0	-0.7
Alcohol	90.4	91.9	92.5	93.1	93.0	93.2	92.6	92.8	+0.2
Cigarettes	73.6	75.4	75.7	75.3	74.0	71.0	71.0	70.1	-0.9

NOTES: Level of significance of difference between the two most recent classes:
s = .05, ss = .01, sss = .001.

NA indicates data not available.

[a] Data based on four questionnaire forms. N is four-fifths of N indicated.

[b] Adjusted for underreporting of amyl and butyl nitrites (see text).

[c] Data based on a single questionnaire form. N is one-fifth of N indicated.

[d] Adjusted for underreporting of PCP (see text).

[e] Only drug use which was not under a doctor's orders is included here.

[f] Adjusted for overreporting of the non-prescription stimulants. Data based on three questionnaire forms. N is three-fifths of N indicated.

TABLE 7

Trends in Annual Prevalence of Sixteen Types of Drugs

	Percent who used in last twelve months								
	Class of 1975	Class of 1976	Class of 1977	Class of 1978	Class of 1979	Class of 1980	Class of 1981	Class of 1982	'81-'82 change
Approx. N =	(9400)	(15400)	(17100)	(17800)	(15500)	(15900)	(17500)	(17700)	
Marijuana/Hashish	40.0	44.5	47.6	50.2	50.8	48.8	46.1	44.3	-1.8
Inhalants[a]	NA	3.0	3.7	4.1	5.4	4.6	4.1	4.5	+0.4
Inhalants Adjusted[b]	NA	NA	NA	NA	9.2	7.8	6.0	6.6	+0.6
Amyl & Butyl Nitrites[c]	NA	NA	NA	NA	6.5	5.7	3.7	3.6	-0.1
Hallucinogens	11.2	9.4	8.8	9.6	9.9	9.3	9.0	8.1	-0.9
Hallucinogens Adjusted[d]	NA	NA	NA	NA	*12.8*	*10.6*	*10.1*	*9.3*	*-0.8*
LSD	7.2	6.4	5.5	6.3	6.6	6.5	6.5	6.1	-0.4
PCP[c]	NA	NA	NA	NA	7.0	4.4	3.2	2.2	-1.0s
Cocaine	5.6	6.0	7.2	9.0	12.0	12.3	12.4	11.5	-0.9
Heroin	1.0	0.8	0.8	0.8	0.5	0.5	0.5	0.6	+0.1
Other opiates[e]	5.7	5.7	6.4	6.0	6.2	6.3	5.9	5.3	-0.6
Stimulants[e]	16.2	15.8	16.3	17.1	18.3	20.8	26.0	26.1	+0.1
Stimulants Adjusted[e,f]	NA	NA	NA	NA	NA	NA	NA	20.3	--
Sedatives[e]	11.7	10.7	10.8	9.9	9.9	10.3	10.5	9.1	-1.4ss
Barbiturates[e]	10.7	9.6	9.3	8.1	7.5	6.8	6.6	5.5	-1.1ss
Methaqualone[e]	5.1	4.7	5.2	4.9	5.9	7.2	7.6	6.8	-0.8
Tranquilizers[e]	10.6	10.3	10.8	9.9	9.6	8.7	8.0	7.0	-1.0s
Alcohol	84.8	85.7	87.0	87.7	88.1	87.9	87.0	86.8	-0.2
Cigarettes	NA	NA	NA	NA	NA	NA	NA	NA	NA

NOTES: Level of significance of difference between the two most recent classes:
s = .05, ss = .01, sss = .001.

NA indicates data not available.

[a]Data based on four questionnaire forms. N is four-fifths of N indicated.

[b]Adjusted for underreporting of amyl and butyl nitrites (see text).

[c]Data based on a single questionnaire form. N is one-fifth of N indicated.

[d]Adjusted for underreporting of PCP (see text).

[e]Only drug use which was not under a doctor's orders is included here.

[f]Adjusted for overreporting of the non-prescription stimulants. Data based on three questionnaire forms. N is three-fifths of N indicated.

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TABLE 8

Trends in Thirty-Day Prevalence of Sixteen Types of Drugs

	Percent who used in last thirty days								
	Class of 1975	Class of 1976	Class of 1977	Class of 1978	Class of 1979	Class of 1980	Class of 1981	Class of 1982	'81-'82 change
Approx. N =	(9400)	(15400)	(17100)	(17800)	(15500)	(15900)	(17500)	(17700)	
Marijuana/Hashish	27.1	32.2	35.4	37.1	36.5	33.7	31.6	28.5	-3.1ss
Inhalants[a]	NA	0.9	1.3	1.5	1.7	1.4	1.5	1.5	0.0
Inhalants Adjusted[b]	NA	NA	NA	NA	3.1	2.7	2.3	2.5	+0.2
Amyl & Butyl Nitrites[c]	NA	NA	NA	NA	2.4	1.8	1.4	1.1	-0.3
Hallucinogens	4.7	3.4	4.1	3.9	4.0	3.7	3.7	3.4	-0.3
Hallucinogens Adjusted[d]	NA	NA	NA	NA	5.5	4.4	4.4	4.3	-0.1
LSD	2.3	1.9	2.1	2.1	2.4	2.3	2.5	2.4	-0.1
PCP[c]	NA	NA	NA	NA	2.4	1.4	1.4	1.0	-0.4
Cocaine	1.9	2.0	2.9	3.9	5.7	5.2	5.8	5.0	-0.8s
Heroin	0.4	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.0
Other opiates[e]	2.1	2.0	2.8	2.1	2.4	2.4	2.1	1.8	-0.3
Stimulants[e]	8.5	7.7	8.8	8.7	9.9	12.1	13.8	13.7	-2.1sss
Stimulants Adjusted[e,f]	NA	NA	NA	NA	NA	NA	NA	10.7	--
Sedatives[e]	5.4	4.5	5.1	4.2	4.4	4.8	4.6	3.4	-1.2sss
Barbiturates[e]	4.7	3.9	4.3	3.2	3.2	2.9	2.6	2.0	-0.6s
Methaqualone[e]	2.1	1.6	2.3	1.9	2.3	3.3	3.1	2.4	-0.7ss
Tranquilizers[e]	4.1	4.0	4.6	3.4	3.7	3.1	2.7	2.4	-0.3
Alcohol	68.2	68.3	71.2	72.1	71.8	72.0	70.7	69.7	-1.0
Cigarettes	36.7	38.8	38.4	36.7	34.4	30.5	29.4	30.0	+0.6

NOTES: Level of significance of difference between the two most recent classes:
s = .05, ss = .01, sss = .001.

NA indicates data not available.

[a] Data based on four questionnaire forms. N is four-fifths of N indicated.

[b] Adjusted for underreporting of amyl and butyl nitrites (see text).

[c] Data based on a single questionnaire form. N is one-fifth of N indicated.

[d] Adjusted for underreporting of PCP (see text).

[e] Only drug use which was not under a doctor's orders is included here.

[f] Adjusted for overreporting of the non-prescription stimulants. Data based on three questionnaire forms. N is three-fifths of N indicated.

TABLE 9

Trends in Thirty-Day Prevalence of Daily Use of Sixteen Types of Drugs

	Percent who used daily in last thirty days								
	Class of 1975	Class of 1976	Class of 1977	Class of 1978	Class of 1979	Class of 1980	Class of 1981	Class of 1982	'81-'82 change
Approx. N =	(9400)	(15400)	(17100)	(17800)	(15500)	(15900)	(17500)	(17700)	
Marijuana/Hashish	6.0	8.2	9.1	10.7	10.3	9.1	7.0	6.3	-0.7
Inhalants[a]	NA	0.0	0.0	0.1	0.0	0.1	0.1	0.1	0.0
Inhalants Adjusted[b]	NA	NA	NA	NA	*0.1*	*0.2*	*0.2*	*0.2*	*0.0*
Amyl & Butyl Nitrites[c]	NA	NA	NA	NA	0.0	0.1	0.1	0.0	-0.1
Hallucinogens	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0
Hallucinogens Adjusted[d]	NA	NA	NA	NA	*0.2*	*0.2*	*0.1*	*0.2*	*+0.1*
LSD	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	-0.1
PCP[c]	NA	NA	NA	NA	0.1	0.1	0.1	0.1	0.0
Cocaine	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.2	-0.1
Heroin	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other opiates[e]	0.1	0.1	0.2	0.1	0.0	0.1	0.1	0.1	0.0
Stimulants[e]	0.5	0.4	0.5	0.5	0.6	0.7	1.2	1.1	-0.1
Stimulants Adjusted[e,f]	NA	NA	NA	NA	NA	NA	NA	0.7	--
Sedatives[e]	0.3	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.0
Barbiturates[e]	0.1	0.1	0.2	0.1	0.0	0.1	0.1	0.1	0.0
Methaqualone[e]	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0
Tranquilizers[e]	0.1	0.2	0.3	0.1	0.1	0.1	0.1	0.1	0.0
Alcohol	5.7	5.6	6.1	5.7	6.9	6.0	6.0	5.7	-0.3
Cigarettes	26.9	28.8	28.8	27.5	25.4	21.3	20.3	21.1	+0.8

NOTES: Level of significance of difference between the two most recent classes:
s = .05, ss = .01, sss = .001.

NA indicates data not available.

[a] Data based on four questionnaire forms. N is four-fifths of N indicated.

[b] Adjusted for underreporting of amyl and butyl nitrites (see text).

[c] Data based on a single questionnaire form. N is one-fifth of N indicated.

[d] Adjusted for underreporting of PCP (see text).

[e] Only drug use which was not under a doctor's orders is included here.

[f] Adjusted for overreporting of the non-prescription stimulants. Data based on three questionnaire forms. N is three-fifths of N indicated.

seniors—or to about the same level we first observed in 1975. As later sections of this report document, much of this reversal appears to be due to increasing concerns about possible adverse effects from regular use, as well as to the perception that peers are now more disapproving of regular marijuana use.

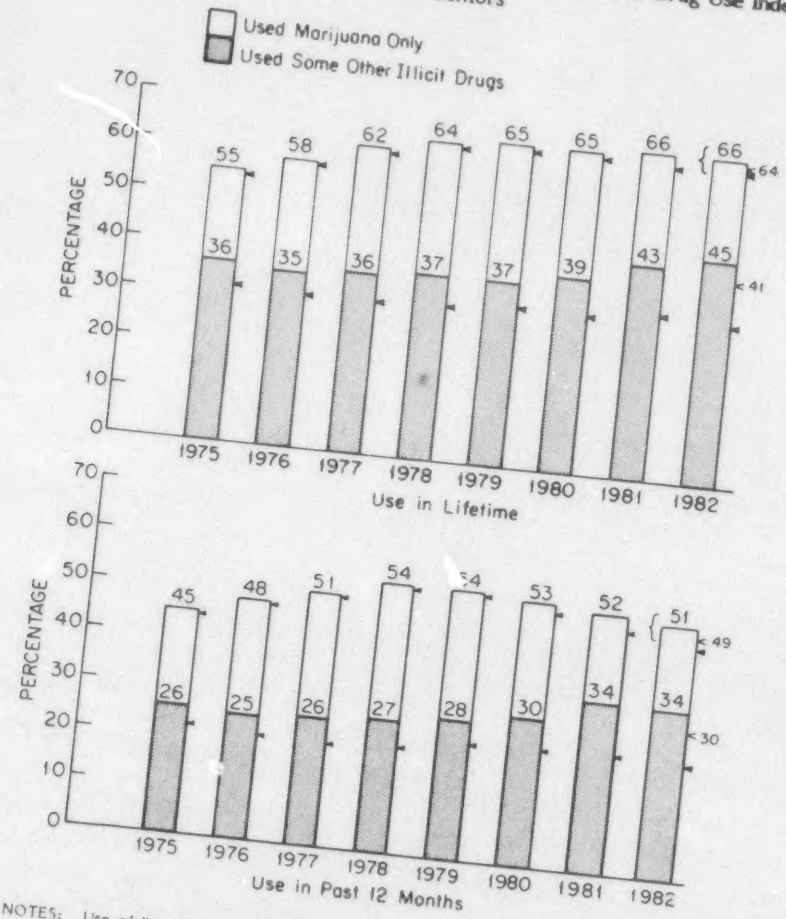
- Until 1978, the proportion of seniors involved in any illicit drug use had increased, primarily because of the increase in marijuana use. About 54% of the classes of 1978 and 1979 reported having tried at least one illicit drug during the last year, up from 45% in the class of 1975. Since 1979, however, the proportion reporting using any illicit drug during the year has dropped by 1% each year. This reversal appears to be due primarily to the change in marijuana use.

- But, as Figure C illustrates, since 1976 there has been a very gradual, steady increase in the proportion who have ever used some illicit drug other than marijuana—an increase which continued this year. The proportion going beyond marijuana in their lifetime has risen from 35% to 43% between 1976 and 1981, and to 45% in 1982. However, the annual prevalence of such behaviors, which had risen from 25% to 34% in 1981, showed no further change this year. (Most of the earlier rise appeared to be due to the increasing popularity of cocaine with this age group between 1976 and 1979, and then due to the increasing use of stimulants since 1979.)

  However, as stated earlier, we believe that this upward shift has been exaggerated by respondents including instances of using over-the-counter substances in their reports of amphetamine use. (See discussion at the end of the introductory section.) A rather different picture of what trends have been occurring in the proportions using illicit drugs other than marijuana emerges when self-reported amphetamine use is excluded from the calculations altogether. (This obviously understates the percent using illicits other than marijuana in any given year, but it might yield a more accurate picture of trends in proportions.) Figure C (and other figures to follow) have been annotated with small markings (➡) next to each year's bar, showing where the shaded area would stop if amphetamines were excluded. The cross-time trend in these markings shows that the proportion going beyond marijuana during the prior year to illicits other than amphetamines was virtually constant between 1979 and 1981 at a peak level of 24% (which is only 1.4% above the 1975 level). The figure for 1982 is down for the first time to 22%—a drop of 2%. Thus with stimulants (including incorrectly reported ones)

FIGURE C

Trends in Lifetime and Annual Prevalence of an Illicit Drug Use Index
All Seniors



NOTES: Use of "some other illicit drugs" includes any use of hallucinogens, cocaine, and heroin, or any use which is not under a doctor's orders of other opiates, stimulants, sedatives, or tranquilizers.

◄ indicates the percentage which results if all stimulants are excluded from the definition of "illicit drugs." ◄ shows the percentage which results if only non-prescription stimulants are excluded.

The bracket near the top of a bar indicates the lower and upper limits of the 95% confidence interval.

included, we see a leveling in the proportion of seniors going beyond marijuana use during the prior year. If all stimulant use is excluded from consideration, we actually see a drop.

- Although the overall proportion using illicit drugs other than marijuana has changed fairly gradually during recent years, more varied and turbulent changes have been occurring for specific drugs within the class. (See Tables 6, 7, and 8 for trends in lifetime, annual, and monthly prevalence figures for each class of drugs.)

- From 1976 to 1979 cocaine exhibited a dramatic and accelerating increase in popularity, with annual prevalence going from 6% in the class of 1976 to 12% in the class of 1979—a two-fold increase in just three years. Little further increase occurred in 1980 and 1981, however, and this year there is evidence of a gradual decline in use (with annual prevalence dropping from 12.4% in 1981 to 11.5% in 1982).

- Like cocaine use, inhalant use had been rising steadily in the mid 1970's, though more slowly and from a lower overall level. Annual prevalence (in the unadjusted version) rose from 3.0% in 1976 and reached a peak of 5.4% in 1979. Since then, however, there has been an overall decline—in part due to a substantial drop in the use of the amyl and butyl nitrites, for which annual prevalence declined from 6.5% in 1979 to 3.6% in 1982. However, while nitrite use fell slightly this year, total inhalant use actually rose a little. Whether this reflects a reversal of the downward trend, or simply a statistical aberration, however, remains to be determined.

- Stimulant use, which had remained relatively unchanged between 1975 and 1978, began to show evidence of a gradual increase in use in 1979. A further increase occurred in 1980, and an even greater increase in 1981. Between 1976 and 1981, reported annual prevalence rose by a full 10.2% (from 15.8% in 1976 to 26.0% in 1981); and daily use tripled, from 0.4% in 1976 to 1.2% in 1981. As stated earlier, we think these increases were exaggerated—perhaps sharply exaggerated—by respondents in recent surveys including non-amphetamine, over-the-counter diet pills (as well as look-alike and sound-alike pills) in their answers. In 1982, we added new versions of the questions on amphetamine use, which were more explicit in instructing respondents not to include over-the-counter pills. (These were added to only three of the five forms of the questionnaire being used: the amphetamine questions were left unchanged in the other two forms.) Tables 6, 7, 8, and 9 now show two

rows for amphetamines. The first, which is based on the unchanged questions, provides comparable data across time for trend estimates. The second row, based on the revised questions, provides for the first time in 1982 an adjusted value which is our best estimate of prevalence of true amphetamine use.*

The unadjusted values in Tables 6, 7, 8, and 9 show a mixed picture in the 1981 to 1982 changes: lifetime prevalence increased by 3.4% (from 32.2% to 35.6%); annual prevalence was virtually unchanged (26.0% vs. 26.1%); and monthly prevalence decreased significantly (by 2.1% from 15.8% to 13.7%). Daily prevalence was down slightly, from 1.2% to 1.1%. These trends suggest a recent decline in stimulant use, so recent that only daily or monthly figures reflect the change. It seems likely that recent publicity on the dangers of over-the-counter diet and stay-awake pills and/or changes in the availability of the "look-alikes" resulting from new restrictive legislation in many states account for some or all of the recent decrease in stimulant use. (Recall that these unadjusted figures erroneously include some use of these substances.)

Trends in true amphetamine use will be available beginning next year, as cross-time data on the revised questions begin to cumulate. However, we do know from a completely separate set of questions, which will be discussed further below, that the number of young people reporting that during the prior twelve months they were around people who are taking amphetamines "to get high or for kicks" has leveled off this year, after a sharp increase over the prior period. This strongly suggests that the rise in the recreational use of stimulants has halted. (Recall that annual prevalence in self-reported use also remained unchanged.) The possibility of a very recent decline in current use, suggested by the monthly and daily use statistics, cannot be addressed in these less precise questions dealing with exposure to use.

- For sedatives the sustained, gradual decline between 1975 and 1979 halted in 1980 and 1981. For example, annual prevalence, which dropped steadily from 11.7% in 1975 to 9.9% in 1979, increased slightly to 10.5% in 1981. This year, though, the longer-term decline continued, as annual prevalence fell to 9.1%—its lowest level yet.

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*We think the unadjusted estimates for the earliest years of the survey were probably little affected by the improper inclusion of non-prescription stimulants, since sales of the latter did not burgeon until after the 1979 data collection.

But, the overall trend lines for sedatives mask differential trends occurring for the two components of the measure (see Figure E). Barbiturate use has declined rather steadily since 1975. Methaqualone use, on the other hand, rose sharply from 1976 until last year. (In fact, it was the only drug other than stimulants that was still rising.) In 1982, the use of methaqualone finally began to decline, which accounts for the overall sedative category resuming its decline.

- Tranquilizers continued their steady decline this year—a decline which began in 1977. Annual prevalence has dropped from 11% in 1977 to 7% in 1982.

- Between 1975 and 1979 the prevalence of heroin use had been dropping rather steadily. Lifetime prevalence dropped from 2.2% in 1975 to 1.1% in 1979 and annual prevalence has also dropped by half, from 1.0% in 1975 to 0.5% in 1979. This decline halted in 1980 and the statistics have remained almost constant since then. But perhaps the fact of greatest significance is that overall use did not increase, considering the greater availability and purity of heroin reported to be entering the United States as a result of instability in opium producing countries in the Middle East.*

- From 1975 to 1981 the use of opiates other than heroin remained fairly stable, with annual prevalence at or near 6%. This year for the first time there is a statistically significant decline observed (from 5.9% to 5.3%).

- Hallucinogen use (unadjusted for underreporting of PCP) declined some in the middle of the decade (from 11.2% in 1975 to 9.6% in 1978 on annual prevalence). Since 1979, when the first adjusted figures are available, there has been a steady decline in that statistic, with adjusted annual prevalence dropping from 12.8% in 1979 to 9.3% in 1982).

- LSD, one of the major drugs comprising the hallucinogen class, showed a decline from 1975 to 1978, followed by considerable stability since then.

- The specific hallucinogen PCP showed a sizeable (and statistically significant) decrease again this year, after even larger drops in 1980 and 1981. (Measures for the

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*Since the impact to date is alleged to be greatest in the Northeastern cities, we examined heroin statistics for the Northeast specifically (see the full 1981 volume for these details) and found no increase there either.

use of this drug were started in 1979.) Annual prevalence, for example, dropped by more than two-thirds in three years, from 7.0% in 1979 to 2.2% in 1982.

- As can be seen from these varied patterns for the several drug classes, while the overall proportion of seniors using any illicit drugs other than marijuana or amphetamines has changed rather little, the mix of drugs they are using has been changing.

- Turning to the licit drugs, between 1975 and 1978 there was a small upward shift in the prevalence of alcohol use (except for daily use) among seniors. To illustrate, the annual prevalence rate rose steadily from 85% in 1975 to 88% in 1978, and monthly prevalence rose from 68% to 72%. Between 1978 and 1980, however, the alcohol prevalence figures remained nearly constant. In the past two years there has been a very slight decline in annual and 30-day prevalence rates; however, this falls short of statistical significance.

- The rate of daily alcohol use has been exceeded by the daily marijuana use rate in this age group since the study began in 1975. It remained quite steady, at about 6%, since the first survey. In fact, it stands at exactly the same level this year (5.7%) as in 1975.

- There had been some increase in the frequency of binge drinking in the last half of the 1970's. When asked whether they had taken five or more drinks in a row during the prior two weeks, 37% of the seniors in 1975 said they had. This proportion rose gradually to 41% by 1979, but then remained perfectly level through 1981. This year that statistic dropped by 0.9%. Thus, to answer a frequently asked question, there is no evidence that the currently observed drop in marijuana use is leading to a concomitant increase in alcohol use. If anything, there may be some parallel drop in alcohol use, just as there was some parallel rise in earlier years.

- As for cigarette use, 1976 and 1977 appear to have been the peak years for lifetime, thirty-day, and daily prevalence. (Annual prevalence is not asked.) Over the subsequent graduating classes, thirty-day prevalence had been dropping, from 38% in the class of 1977 to 29% in the class of 1981. More importantly, daily cigarette use dropped over that same interval from 29% to 20%, and daily use of half-pack-a-day or more had fallen from 19.4% to 13.5% between 1977 and 1981 (nearly a one-third decrease). Last year we reported that the decline appeared to be decelerating; and this

year it halted and perhaps even reversed slightly, with the proportion smoking half-a-pack or more per day rising from 13.5% in 1981 to 14.2% in 1982, and the proportion reporting daily use at any level rising slightly from 20.3% to 21.1%. (Neither of these shifts is statistically significant).

As with daily marijuana use, it appears that the rather large drop in daily smoking rates was in response to both personal concerns about the health consequences of use, and a perceived peer disapproval of regular use—both of which rose steadily until last year. (See the relevant sections below.)

Trend Comparisons for Important Subgroups

Sex Differences in Trends

- Most of the sex differences mentioned earlier for individual classes of drugs have remained relatively unchanged over the past seven years—that is, any trends in overall use have occurred about equally among males and females, as the trend lines in Figures D and E illustrate. There are however, a few exceptions.

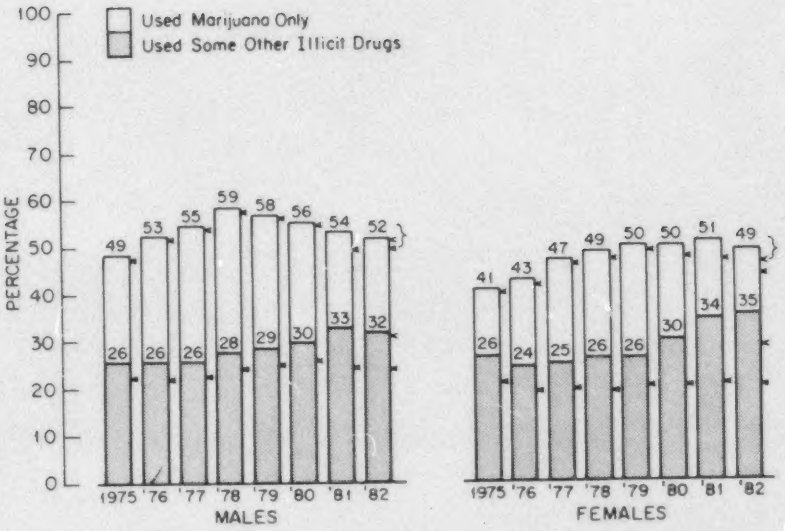
- Since 1977, the small sex difference involving tranquilizer use (men this age had used them less frequently than women) has disappeared, due to a faster decline among females.

- The ratio of male-female prevalence rates in cocaine use, which was rather large in the mid-1970's, has diminished somewhat in the early 1980's; nevertheless, there remains a sizeable sex difference, with males using more frequentiy.

- An examination of the trends in the proportion of each sex using any illicit drug (see Figure D) suggests that use among males rose between 1975 and 1978, and has been declining since then (from 59% in 1978 to 52% in 1982). Use among females also increased between 1975 and 1978, and then continued to increase until 1981 (from 41% in 1975 to 51% in 1981) before dropping slightly this year (to 49%). However, if amphetamine use is deleted from the statistics (see ◄ notations in Figure D) female use peaked in 1979 and then declined as well. (Note that the declines for both males and females are attributable to the declining marijuana use rates.) Obviously, the recent climb in reported amphetamine use has occurred somewhat more among females. For example, between 1978 and 1982 female amphetamine use (lifetime) rose by 16.4% (from 23.2% to 39.6%) while male use rose by 9.5%

FIGURE D

Trends in Annual Prevalence of an Illicit Drug Use Index
by Sex



NOTES: Use of "some other illicit drugs" includes any use of hallucinogens, cocaine, and heroin, or any use which is not under a doctor's orders of other opiates, stimulants, sedatives, or tranquilizers.

« indicates the percentage which results if all stimulants are excluded from the definition of "illicit drugs." « shows the percentage which results if only non-prescription stimulants are excluded.

The bracket near the top of a bar indicates the lower and upper limits of the 95% confidence interval.

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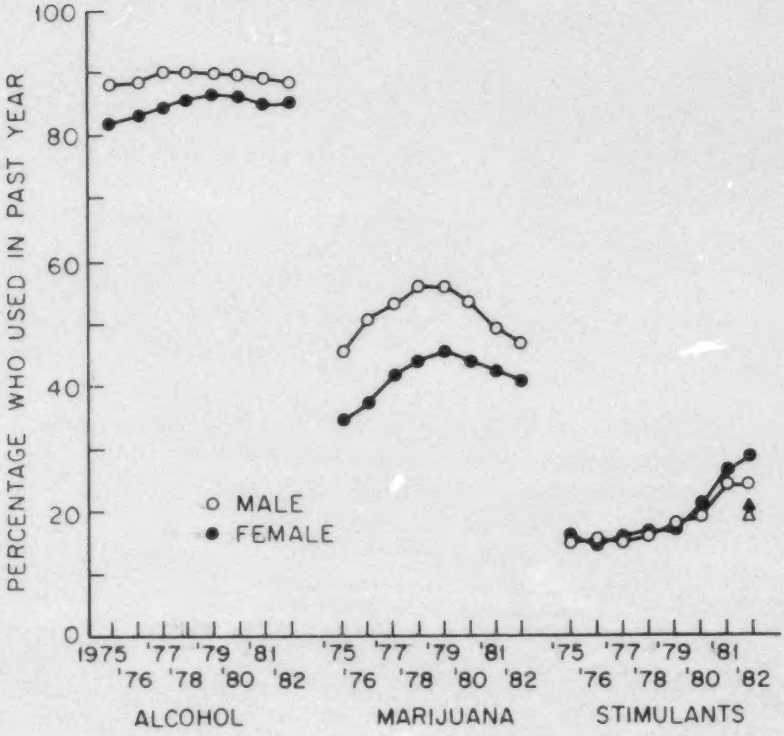
FIGURE E

Trends in Annual Prevalence of Fifteen Drugs
by Sex



NOTE: The triangles indicate the percentages which result if non-prescription stimulants are excluded.

FIGURE E (cont.)

Trends in Annual Prevalence of Fifteen Drugs
by Sex

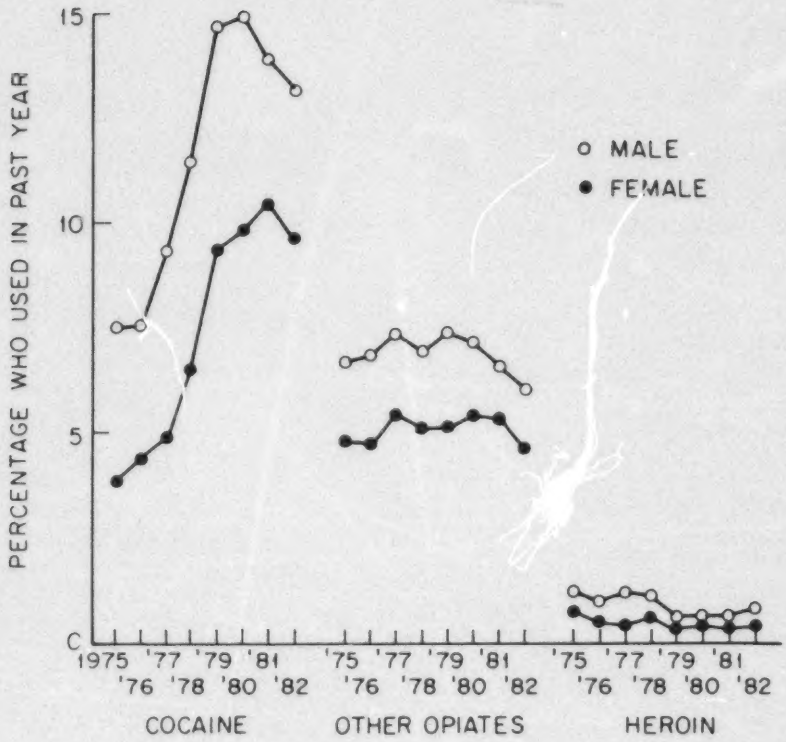


FIGURE E (cont.)

Trends in Annual Prevalence of Fifteen Drugs
by Sex

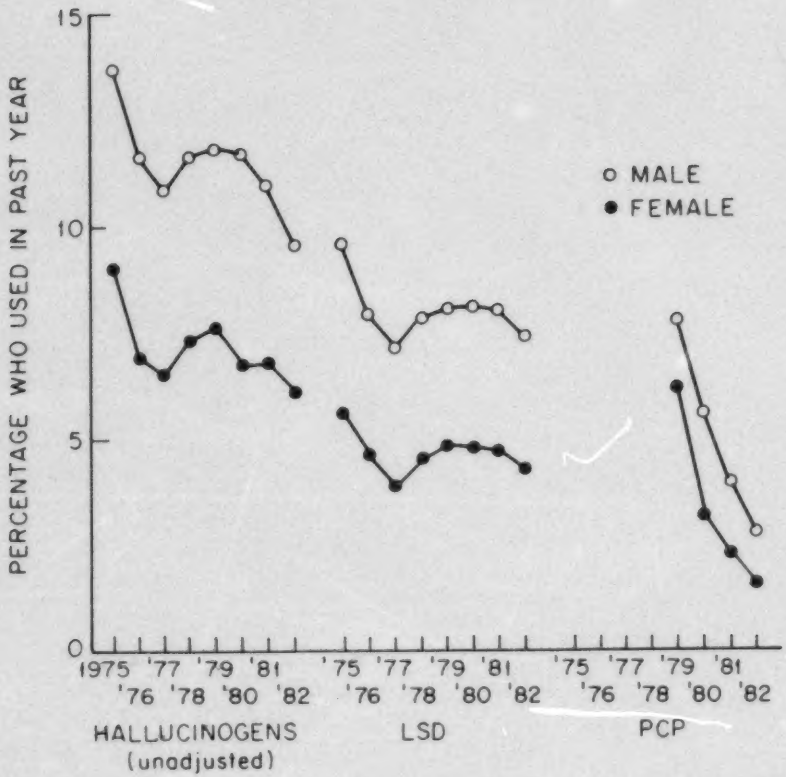


FIGURE E (cont.)

Trends in Annual Prevalence of Fifteen Drugs
by Sex

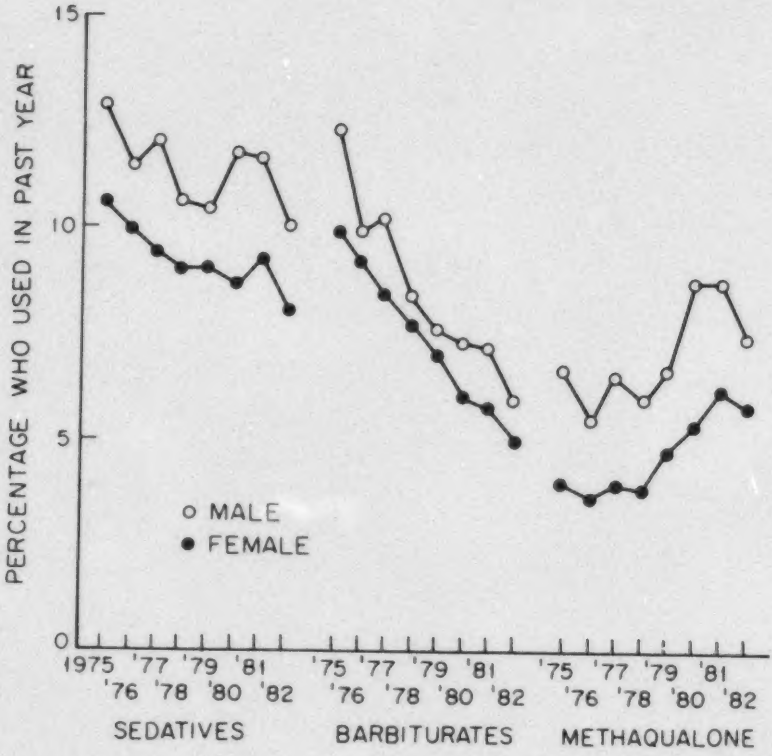


FIGURE E (cont.)

Trends in Annual Prevalence of Fifteen Drugs
by Sex

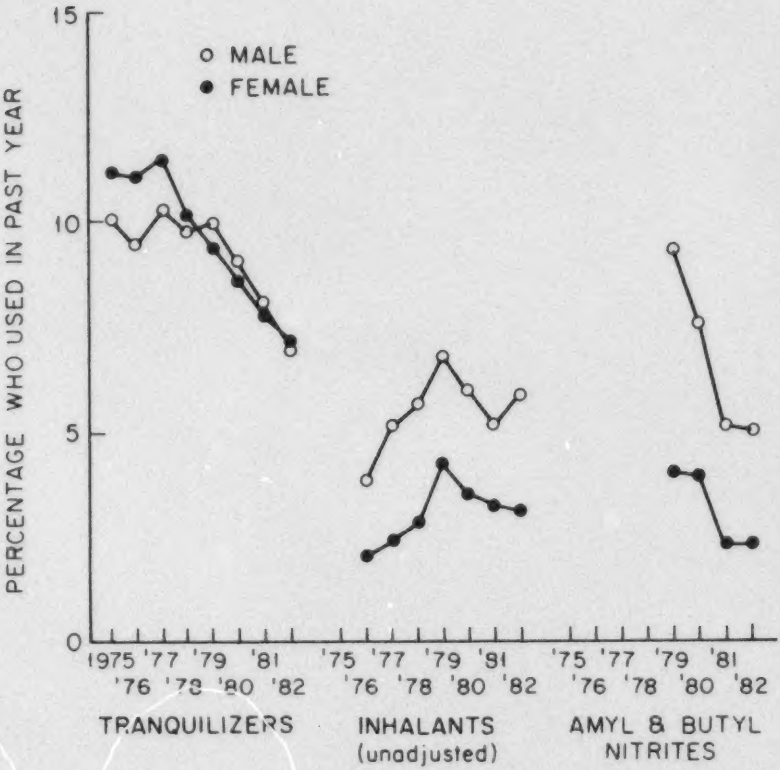
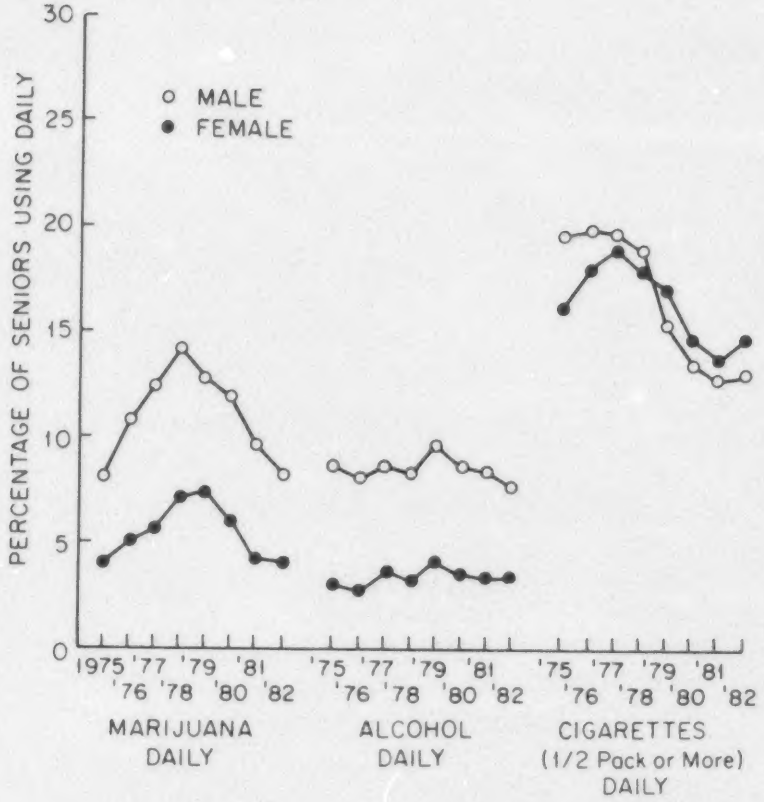


FIGURE F

Trends in Thirty-Day Prevalence of Daily Use of Marijuana, Alcohol, and Cigarettes by Sex



NOTE: Daily use for alcohol and marijuana is defined as use on 20 or more occasions in the past thirty days. Daily use of cigarettes is defined as smoking a half-pack or more per day in the past thirty days.

(from 22.3% to 31.8%). As noted earlier, these figures undoubtedly overestimate "true" amphetamine prevalence figures. The 1982 lifetime-prevalence estimate for females, based on the two unrevised questionnaire forms, is a startling 39.6%; however, based on the three revised questionnaire forms, the corresponding estimate is considerably lower, 28.2%. This means, of course, that a high proportion (almost 30%) of the unrevised estimate for females is due to erroneous inclusion of non-prescription stimulants (largely diet pills). For males, the discrepancy is considerably smaller: the revised estimate is 26.8% vs. 31.8% for the unrevised estimate.

- Regarding the apparent parity between the sexes in the trends in the use of illicit drugs other than marijuana, it can be seen in Figure D that, when amphetamine use is excluded from the calculations, somewhat differential trends emerge for males vs. females. This is because there are more females today who use only amphetamines and the exclusion of amphetamines from the calculations results in a virtually stable trend line for females in the use of illicits other than marijuana or amphetamines.

- The sex differences in alcohol use have narrowed gradually since 1975. For example, the thirty-day prevalence rates for males and females differed by 12.8% in 1975 (75.0% vs. 62.2% respectively), but that difference was down to 8.7% by 1982. And, although there still remain substantial sex differences in daily use and occasions of binge drinking, there has been some narrowing of the differences there, as well. For example, between 1975 and 1982 the proportion of males admitting to having five drinks in a row during the prior two weeks showed a net increase of only .8% (from 49.0% to 49.8%), whereas a net increase of 4.7% occurred for females (from 26.4% to 31.1%). In essence, females accounted for nearly all of the overall increase.*

- Regarding cigarette smoking, we observed in 1977 that females for the first time caught up to males at the half-a-pack per day smoking level (Figure E). Then, between 1977 and 1981, both sexes showed a decline in the prevalence of such smoking; but use among males dropped more, resulting in a reversal of the sex

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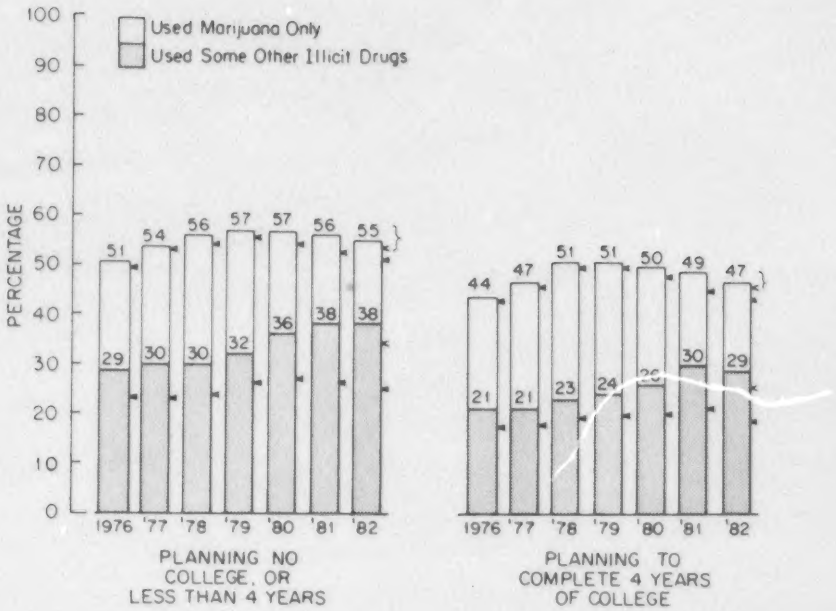
*It is worth noting that the same number of drinks produces substantially greater impact on the blood alcohol level of the average female than the average male, because of sex differences in body weight. Thus, sex differences in frequency of actually getting drunk may not be as great as the binge drinking statistics would indicate, since they are based on a fixed number of drinks.

FIGURE G

Trends in Annual Prevalence of an Illicit Drug Use Index
by College Plans



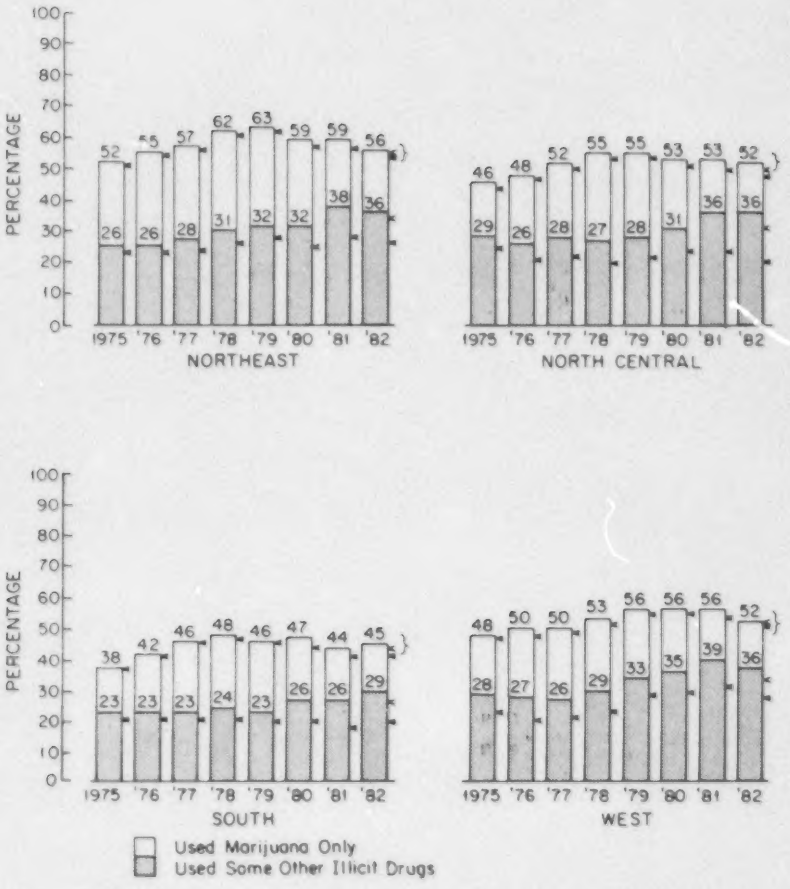
NOTES: Use of "some other illicit drugs" includes any use of hallucinogens, cocaine, and heroin, or any use which is not under a doctor's orders of other opiates, stimulants, sedatives, or tranquilizers.

◂ indicates the percentage which results if all stimulants are excluded from the definition of "illicit drugs." ◂ shows the percentage which results if only non-prescription stimulants are excluded.

The bracket near the top of a bar indicates the lower and upper limits of the 95% confidence interval.

FIGURE H

Trends in Annual Prevalence of an Illicit Drug Use Index
by Region of the Country



NOTES: See Figure G for relevant footnotes.

differences. This year both sexes showed a small increase in half-pack-a-day use, and females still remain slightly higher—14.7% vs. 13.1%. (At less frequent levels of smoking there is a somewhat larger sex difference, since there are more occasional smokers among females than among males.)

Trend Differences Related to College Plans

- Both college-bound and noncollege-bound students have been showing fairly parallel trends in overall illicit drug use over the last several years (see Figure G).*

- Changes in use of the specific drug classes have also been quite parallel for the two groups since 1976, except for sedatives and inhalants.

- Sedative use rose somewhat between 1978 and 1980 among the noncollege segment, while falling slightly among the college-bound. Looking at the two ingredient subclasses of sedatives, barbiturates and methaqualone, we find that the groups show somewhat differential trends on both. Barbiturate use for both groups dropped some over that period, but only slightly for the noncollege (annual prevalence down 0.1% to a level of 9.0% in 1980) compared to the college-bound (down 2.0% to a level of 4.8%). Over the same interval methaqualone use increased in both groups, but less among the collegebound (up 1.2% to a level of 5.5%) than among the noncollege-bound (up 3.8% to a level of 8.9%). The net result was a considerable divergence in sedative use. Between 1980 and 1982, however, there has been no further divergence between these groups.

- There was some convergence in annual prevalence of inhalant use (unadjusted) between 1979 and 1981; although both groups showed a decline over those two years, the noncollege-bound showed a faster decline, particularly in the use of the nitrites.

Regional Differences in Trends

- In terms of the proportion of seniors using any illicit drug during the year, all four regions of the country reached their peaks in 1978 or 1979. The West, however, did not actually start to decline until this year.

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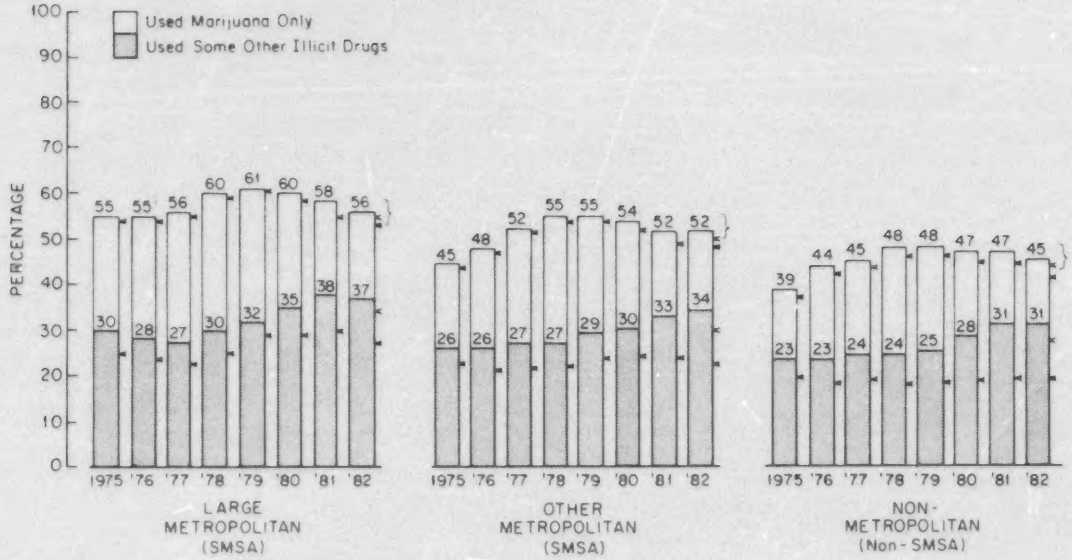
*Because of excessive missing data in 1975 on the variable measuring college plans, group comparisons are not presented for that year.

FIGURE I

Trends in Annual Prevalence of an Illicit Drug Use Index
by Population Density



NOTES: See Figure G for relevant footnotes.

- Until this year, the proportion using an illicit drug other than marijuana (unadjusted) had been increasing in all regions (though only slightly in the South). This year, however, all regions (except the South) showed a substantial decline. The South remained unchanged. (As noted earlier, a major factor in the rise of illicit drug use other than marijuana had been an increase in reported amphetamine use. Such a rise appeared in all four regions; however the rise from 1978 to 1981 was only 2% in the South, whereas in the other regions the percentages all had risen between 7% and 10%. In essence, the South has been least affected by both the rise and the fall in reported amphetamine use.)

- When amphetamine use is excluded, as shown by the arrow (◄) in Figure H, then a rather different picture appears for regional trends during the late seventies and early eighties. Use of illicits other than marijuana and amphetamines actually started to decline in the South and North Central in 1981—both regions having had fairly level rates of use prior to that. Rates in the West and the Northeast did not begin their decline until 1982, after a period of some increase in student involvement with such drugs (but not as great an increase as the "uncorrected" figures would suggest).

- Cocaine use is primarily responsible for the above-noted trends in the West and the Northeast. Between 1976 (when cocaine use in all four regions ranged from 5% to 8%) and 1978, annual prevalence rates in the West and the Northeast roughly tripled. In the North Central regions these rates only doubled by 1979 and 1980, and then began declining in 1981; while in the South annual prevalence of cocaine use showed a smaller rise through 1979, and then began declining. This year cocaine use finally began to decline in the West (and it has leveled in the Northeast). The regional differences in cocaine use (e.g., in 1981 three times as many seniors in the West as in the South reported any use during the past year) have been among the most dramatic we have seen (see Table 4, also Tables 3 and 5).

- There is some evidence to suggest an increase in heroin use this year in the Northeast, although we consider the change to be too small to be conclusive (annual prevalence rose from .5% to .9%).

- Regarding alcohol use, there is evidence of a decline this year in the Northeast, where thirty-day prevalence, daily use, and binge drinking statistics all dropped. Another year's data are required to confirm this trend.

Trend Differences Related to Population Density

- There now appears to have been a peaking in 1979 in the proportions using any illicit drug in all three levels of community size (Figure I). Although the smaller metropolitan areas and the non-metropolitan areas never caught up completely with their larger counterparts, they did narrow the gap some between 1975 and 1979. Most of that narrowing was due to changing levels of marijuana use, and most of it occurred prior to 1978.

- The overall proportion involved in illicit drugs other than marijuana also has peaked in communities of all sizes, but not until this year. Up to 1981, the proportions reporting the use of some illicit drug other than marijuana had been increasing continuously (over a four year period in the very large cities, and over a three year period in the smaller metropolitan and non-metropolitan areas). As can be seen by the special notations in Figure I, almost all of this increase is attributable to the rise in reported amphetamine use (which likely is artifactual in part).

- The increase in cocaine use, although dramatic at all levels of urbanicity between 1976 and 1979, was greatest in the large cities. There has been a slight (but not statistically significant) decline in use in the large cities since 1980, and in the smaller cities since 1981. Cocaine use has been fairly stable for the last two years in the non-metropolitan areas.

- The large cities are the only category of community size showing an increase in heroin use this year. (Annual prevalence rose from 0.3% in 1981 to 0.7% in 1982.)

USE AT EARLIER GRADE LEVELS

In two of the five questionnaire forms used in the study, respondents are asked to indicate the grade in which they were enrolled when they first tried each class of drugs. Graphic presentations on a drug-by-drug basis of the trends for earlier grade levels and of the changing age-at-onset curves for the various graduating classes are contained in the large 1978 and 1981 reports from the study (cited earlier). For the purposes of these highlights, only some of these figures are included. Table 10 gives the percent of the 1982 seniors who first tried each drug at each of the earlier grade levels.

Grade Level at First Use

- Initial experimentation with most illicit drugs occurs during the final three years of high school. Each illegal drug, except marijuana, had been used by no more than 10% of the class of 1982 by the time they entered tenth grade. (See Table 10.)

- However, for marijuana, alcohol, and cigarettes, most of the initial experiences took place before high school. For example, daily cigarette smoking was begun by 15% prior to tenth grade vs. only an additional 9% in high school (i.e., in grades ten through twelve). The figures for initial use of alcohol are 56% prior to and 37% during high school; and for marijuana, 35% prior to and 24% during high school.

- Among inhalant users (unadjusted for nitrite underreporting), over half had their first experience prior to tenth grade. However, this unadjusted statistic probably reflects the predominant pattern for such inhalants as glues and aerosols, which tend to be used primarily at younger ages. We know that the underreporting of use of amyl and butyl nitrites in this category yields an understatement of the number of students who initiated inhalant use in the upper grade levels. This is apparent from age-at-first-use statistics for this subclass in Table 10.

TABLE 10

Grade of First Use for Sixteen Types of Drugs, Class of 1982

Grade in which drug was first used:	Marijuana	Inhalants [a]	Amyl / Butyl Nitrites	Hallucinogens [a]	LSD	PCP	Cocaine	Heroin	Other Opiates	Stimulants [b] (adjusted)	Sedatives	Barbiturates	Methaqualone	Tranquilizers	Alcohol	Cigarettes (Daily)
6th	2.7	2.1	0.1	0.1	0.1	0.2	0.1	0.0	0.4	0.1	0.3	0.2	0.0	0.6	9.4	3.0
7-8th	15.4	3.4	1.6	0.8	0.5	1.0	0.5	0.2	0.6	1.6	1.0	0.7	0.5	1.0	21.4	7.1
9th	16.9	2.3	2.7	2.7	2.0	1.2	1.8	0.3	1.7	5.9	3.2	2.6	1.9	2.6	24.9	5.3
10th	11.9	2.6	2.3	3.7	2.9	1.7	3.9	0.2	2.5	8.1	4.4	3.7	3.2	3.9	18.0	4.2
11th	7.9	0.9	2.3	3.4	2.6	1.0	5.4	0.3	2.3	8.4	4.1	2.2	3.2	3.9	12.9	3.2
12th	4.0	1.5	0.8	1.8	1.4	0.9	4.3	0.2	2.1	3.6	2.2	0.9	1.9	2.0	6.1	1.7
Never used	41.3	87.2	90.2	87.5	90.4	94.0	84.0	98.8	90.4	72.1	84.8	89.7	89.3	86.0	7.2	75.4

NOTE: This question was asked in two of the five forms (N = approximately 6400), except for inhalants, PCP, and the nitrites which were asked about in only one form (N = approximately 3200). Only one form is used for stimulants in this table.

[a] Unadjusted for known underreporting of certain drugs. See page 18.

[b] Adjusted for overreporting of the non-prescription stimulants.

- PCP use shows a relatively early age of initiation as well, with about 40% of the eventual users having started before high school.

- For each illicit drug except inhalants and marijuana, less than half of the users had begun use prior to tenth grade. Among those who had used cocaine by senior year, only about one in seven had used prior to tenth grade. For most of the other illicit drugs, the corresponding proportion is roughly from one-fifth to one-third. These data do indicate, however, that significant minorities of eventual users of these drugs are initiated into illicit drug use prior to tenth grade.

- Stimulant use in the class of 1982 shows a particularly large jump in incidence relatively late in the school years—i.e., in eleventh grade. This is partly due to a recent upward secular trend in the use of this drug. Earlier classes showed somewhat different relative incidence rates across the grade levels, as Figure J-5 helps to illustrate.

Trends in Use at Earlier Grade Levels

- Using the retrospective data provided by members of each senior class concerning their grade at first use, it is possible to reconstruct lifetime prevalence curves at lower grade levels during the years when each class was at various grade levels. Obviously, data from eventual dropouts from school are not included in any of the curves. Figures J-1 through J-18 show the reconstructed lifetime prevalence curves for earlier grade levels for a number of drugs.

- Figure J-1 provides the trends at each grade level for lifetime use of any illicit drug. It shows that for all grade levels there was a continuous increase in illicit drug involvement through the seventies. The increase is fortunately quite small for use prior to sixth grade; only 1.1% of the class of 1975 reported having used an illicit drug before 6th grade (which was in 1969 for that class), but the figure has increased modestly, and for the class of 1982 is at 3.6% (which was in 1976 for that class). The lines for the other grade levels all show much steeper upward slopes, indicating that the more recent classes had initiated illicit drug use earlier than the less recent classes. For example, more than half (52%) of the class of 1982 had used some illicit drug by the end of grade 10, compared to 37% of the class of 1975.

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Beginning in 1980, though, there is a leveling off at the high school level in the proportion becoming involved in illicit drugs. There may well be a leveling (or even a decline) in the lower grades in the same period; but insufficient data are available at present to confirm that fact.

- Most of the increase in any illicit drug use was due to increasing proportions using marijuana. We know this from the results in Figure J-2 showing trends for each grade level in the proportion having used any illicit drug other than marijuana in their lifetime. Compared to Figure J-4 for marijuana use, these trend lines are relatively flat throughout the seventies and, if anything, began to taper off among ninth and tenth grade between 1975 and 1977. The biggest cause of the increases in these curves from 1978 to 1981 was the rise in reports of amphetamine use. As noted earlier, we suspect that at least some of this rise is artifactual. If amphetamine use is removed from the calculations, even greater stability is shown in the proportion using illicits other than marijuana or amphetamines. (See Figure J-3).

- As can be seen in Figure J-4, for the years covered across the decade of the 70's, marijuana use had been rising steadily at all grade levels down through seventh grade. Beginning in 1979, marijuana involvement began to decline for grades 10 through 12. Further, the trend lines for grades 7 through 9 show a decelerating curve, suggesting they all may have reached an asymptote by the end of the seventies, as well. Importantly, there appears to have been little ripple effect in marijuana use down to the elementary schools, through 1976. (Use prior to 6th grade rose only slightly, from 0.6% for the class of 1975 to 2.7% for the class of 1982.) The two most recent national household surveys by NIDA would suggest that this continues to be true: the proportion of 12 to 13 year olds reporting any experience with marijuana was 6% in 1971, 8% in 1977, and 8% in 1979. Presumably sixth graders would have even lower absolute rates since the average age for sixth graders is less than twelve.*

- Cocaine use (Figure J-5) presents a somewhat less even picture, perhaps in part because the scale has been magnified to show the smaller percentages. In spite of the unevenness, one clear contrast to the marijuana pattern may be drawn. Most initiation into

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*See National Survey on Drug Abuse: Main Findings 1979 by P.M. Fishburne, H.I. Abelson, and I. Cisin. Rockville, Md: National Institute on Drug Abuse, 1980.

cocaine use takes place in the last two years of high school (rather than earlier, as is the case for marijuana).

- The lifetime prevalence statistics for stimulants peaked briefly for grade levels 9 through 12 during the mid 70's. (See Figure J-6.) However, it showed a sharp rise in the late 70's, at least in the upper grades (for which we have sufficiently recent data). As has been stated repeatedly, we believe that some—perhaps most—of this recent upturn is artifactual in the sense that non-precription stimulants account for much of it. However, regardless of what accounts for it, there was a clear upward secular trend—that is, one derived across all cohorts and grade levels—beginning in 1979.

- Lifetime prevalence of hallucinogen use (unadjusted for underreporting of PCP) began declining among students at most grade levels in the mid 1970's (Figure J-7), though it appears that a leveling and possibly some reversal has now taken place, due almost entirely to the trends in LSD use. (The trend curves for LSD (not shown) are extremely similar in shape, though lower in level, of course.)

- While there is relatively little trend data for PCP, since questions about grade of first use of PCP were not included until 1980, some interesting results emerge. From the rather checkered data available, it appears that the sharp downturn began around 1979 (see Figure J-8). If the hallucinogen figure (J-7) were adjusted for underreporting of PCP use, it would clearly be showing some downturn in recent years.

- Questions about age at first use for inhalants (unadjusted for the nitrites) have been asked only since 1978. The retrospective trend curves (Figure J-9) indicate relatively little change, although there is some suggestion that during the 1970's, experience with inhalants decreased for most grade levels and then began to rise again.

- Since grade-at-first-use data have been gathered for the nitrites beginning in 1979, only a few pieces of retrospective trend lines can be constructed (Figure J-10). These do not show the recent increase observed for the overall inhalant category. (We know, of course, that current use of nitrites has been declining.)

- Figure J-11 shows that the lifetime prevalence of sedative use, like stimulant use, began declining for all grade levels in the mid 70's. (Recall that annual prevalence observed for seniors had been declining steadily from 1975 to 1979.) As the graphs for the two

subclasses of sedatives—barbiturates and methaqualone—show, the trend lines have been different for them at earlier grade levels as well as in twelfth grade (see Figures J-12 and J-13). Since about 1974 or 1975, lifetime prevalence of barbiturate use had fallen off sharply at all grade levels for all classes until the class of 1981. The class of 1981 showed a very slight reversal of this pattern of declining use, but the class of 1982 appears to be continuing the earlier pattern of decline. Methaqualone use started to fall off at about the same time as barbiturate use in the lower grade levels, but dropped rather little and then flattened. Since about 1978, there has been some increase in use—in nearly all grade levels, but the more recent statistics for the upper grades show a leveling (while the "current use" statistics for twelfth grades show the beginning of another decline).

- Lifetime prevalence of tranquilizer use (Figure J-14) also began to decline at all grade levels in the mid-70's Overall it would appear that the tranquilizer trend lines have been following a similar course to that of sedatives. So far, the curves are different only in that tranquilizer use continued a steady decline among twelfth graders, while sedative use did not.

- Though a little difficult to see, the heroin lifetime prevalence figures for grades 9 through 12 all began declining in the mid 1970's, have since leveled, and show no evidence of reversal as yet (Figure J-15). The lifetime prevalence of use of opiates other than heroin remained quite flat at all grade levels since the mid-70's (Figure J-16). (But this year's data on current use among seniors suggest that a decline may be beginning to occur.)

- Figure J-17 presents the lifetime prevalence curves for cigarette smoking on a daily basis. It shows dramatically that initiation to daily smoking was beginning to peak at the lower grade levels in the mid 1970's. This peaking did not become apparent among high school seniors until later in the 70's. In essence, these changes reflect in large part cohort effects—changes which show up consistently across the age band for certain class cohorts. Because of the highly addictive nature of nicotine, this is a type of drug-using behavior in which one would expect to observe enduring differences between cohorts if any are observed at a formative age. Unfortunately, the most recent cohort indicates a bottoming of this dramatic decline, and even the possibility of some reversal.

- The comparable curves for lifetime prevalence of alcohol use at earlier grade levels (Figure J-18) are very flat, suggesting that very little change in initiating rates took place at earlier grade levels across the years covered. Recall, however, that among seniors some modest increase in the drinking of a large quantity of alcohol on occasion did occur between 1975 and 1979. It is possible that similar shifts took place in lower grade levels, as well.

FIGURE J-1

Use of Any Illicit Drug: Trends in Lifetime Prevalence for Earlier Grade Levels
Based on Retrospective Reports from Seniors

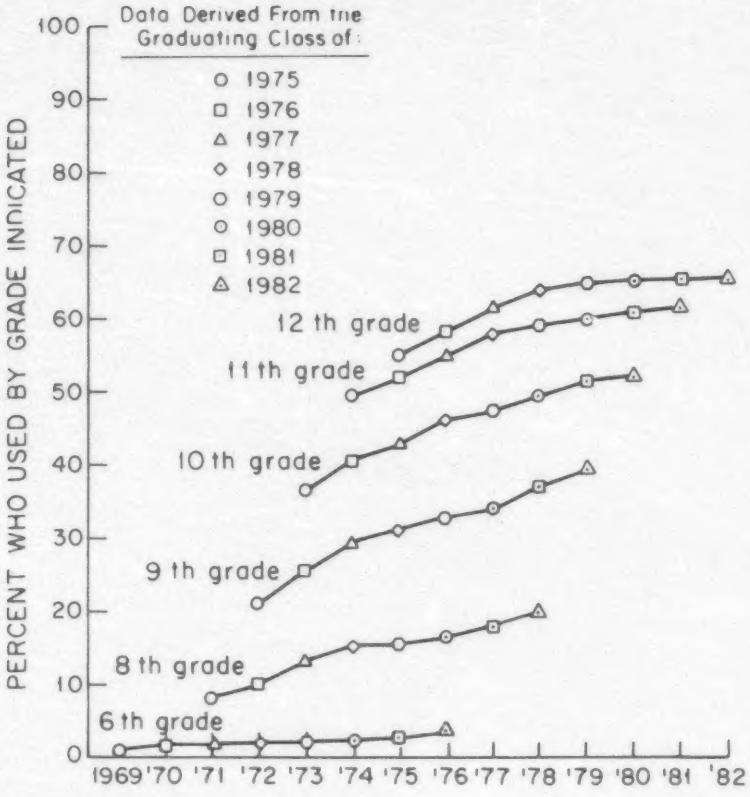

FIGURE 7.2

Use of Any Illicit Drug Other Than Marijuana: Trends in Lifetime Prevalence for Earlier Grade Levels
Based on Retrospective Reports from Seniors

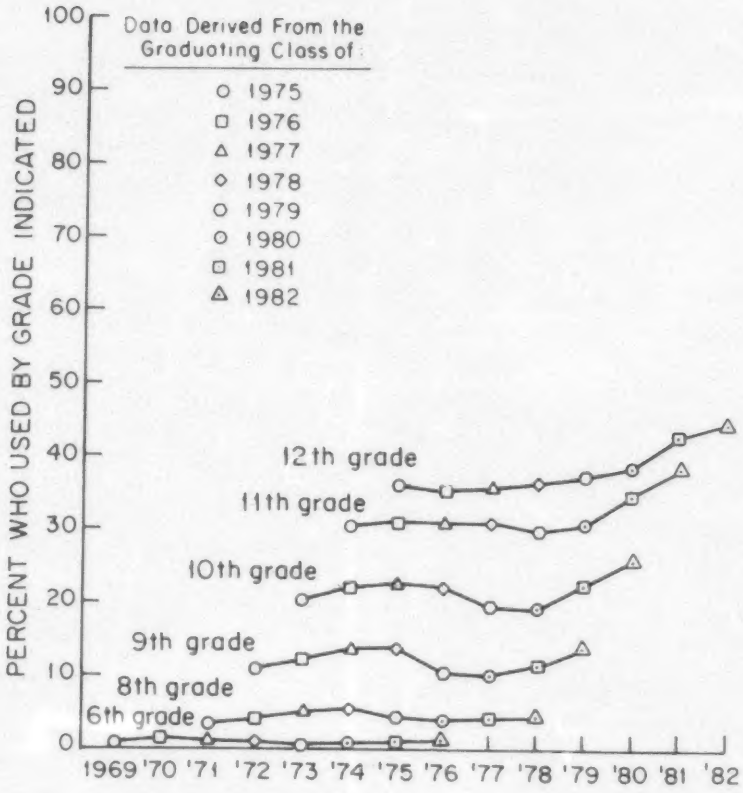

FIGURE J-3

Use of Any Illicit Drug Other Than Marijuana or Amphetamines: Trends in Lifetime Prevalence for Earlier Grade Levels
Based on Retrospective Reports from Seniors

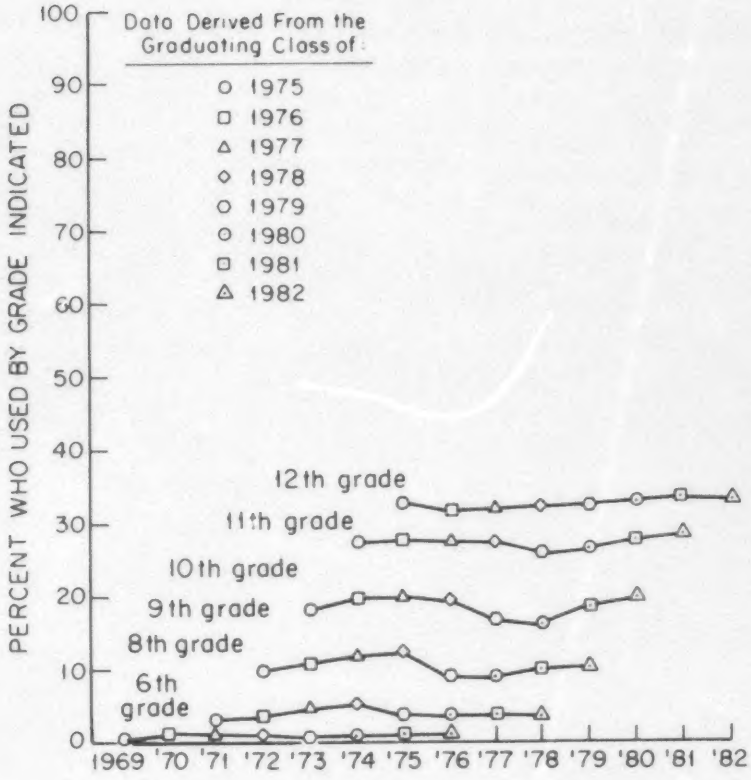

FIGURE J-4

Marijuana: Trends in Lifetime Prevalence for Earlier Grade Levels
Based on Retrospective Reports from Seniors

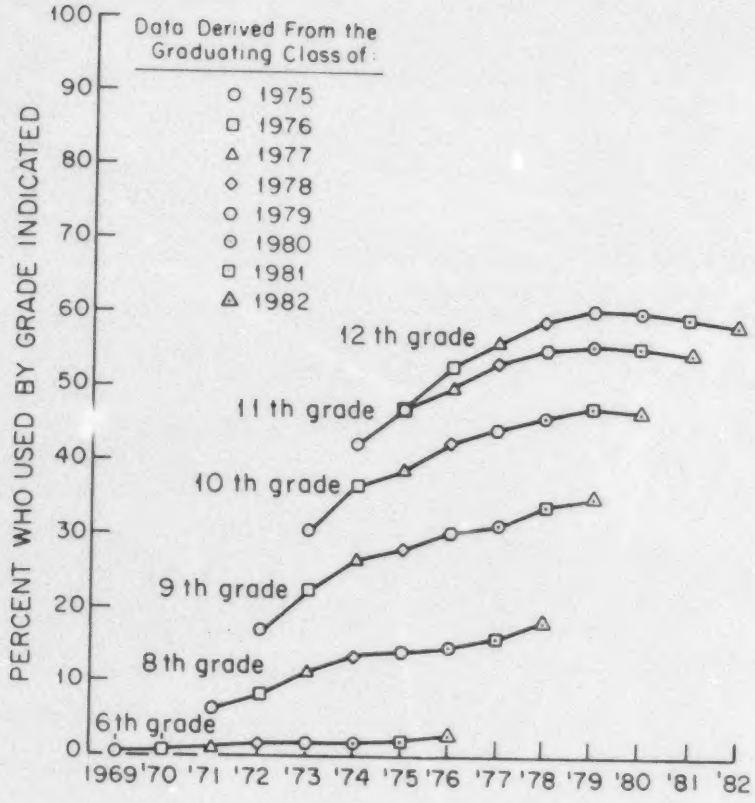

FIGURE 1-5

Cocaine: Trends in Lifetime Prevalence for Earlier Grade Levels
Based on Retrospective Reports from Seniors

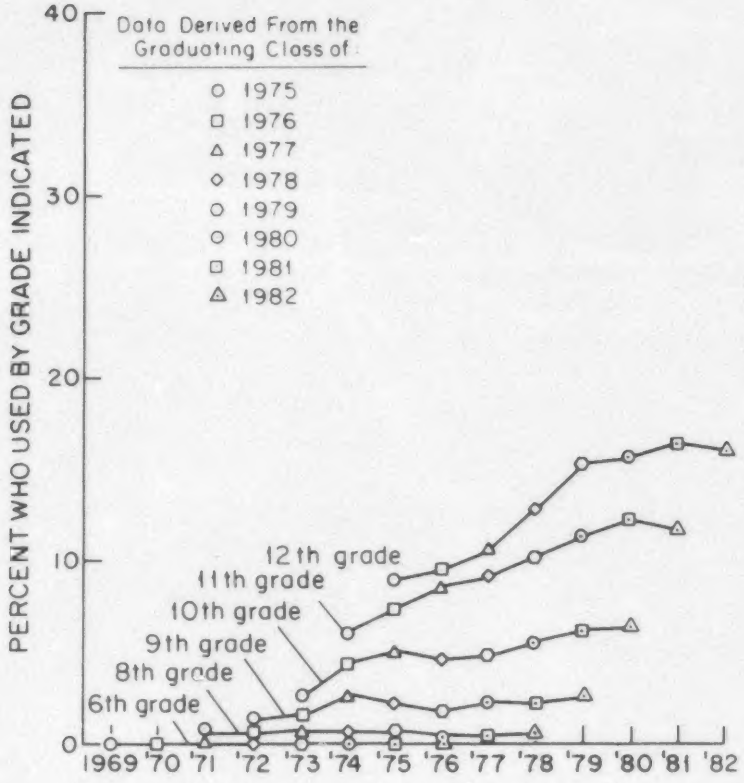

FIGURE J-6

Stimulants: Trends in Lifetime Prevalence for Earlier Grade Levels
Based on Retrospective Reports from Seniors

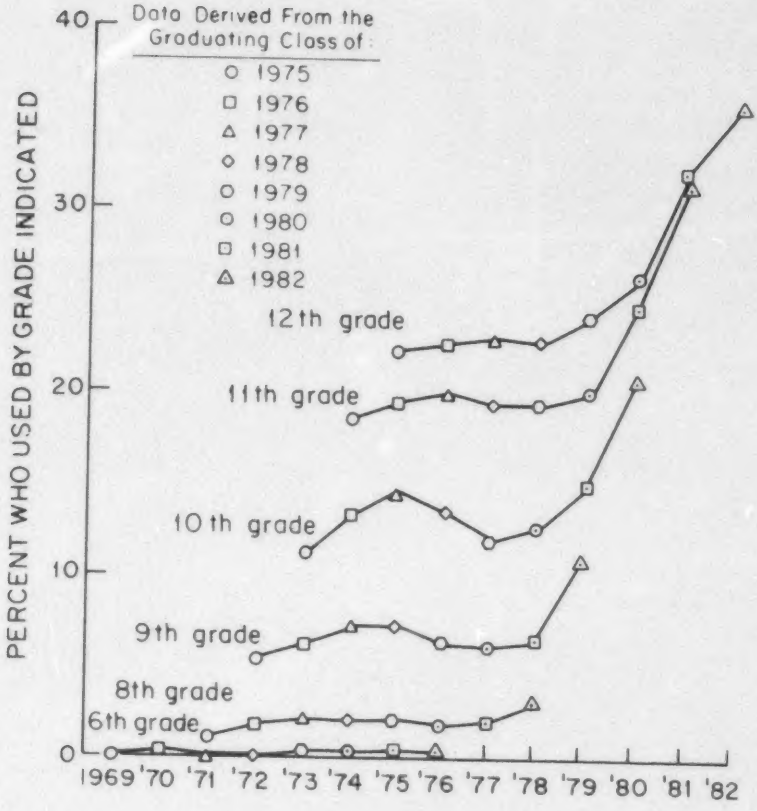

FIGURE J-7

Hallucinogens: Trends in Lifetime Prevalence for Earlier Grade Levels Based on Retrospective Reports from Seniors

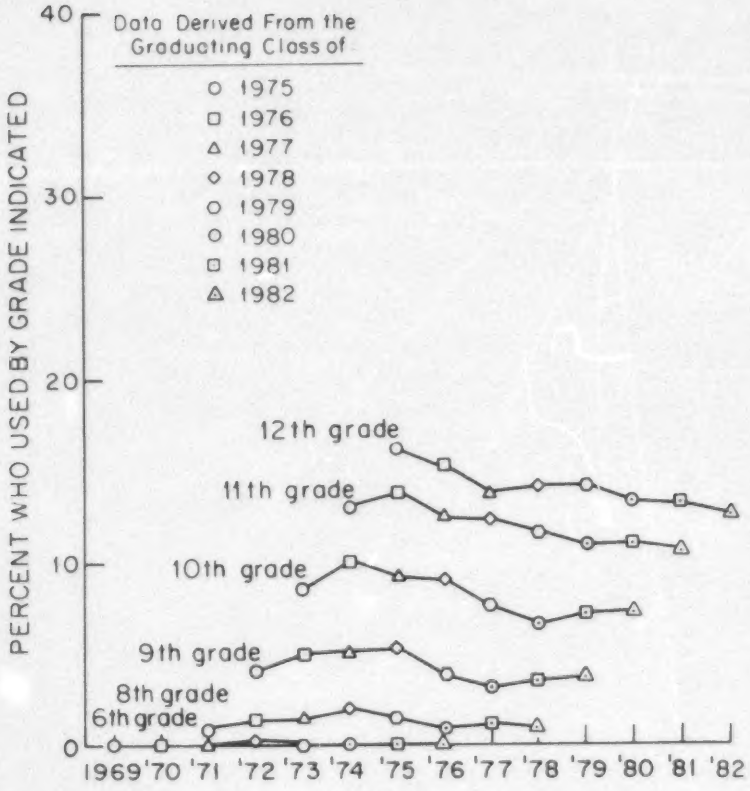

FIGURE J-8

PCP: Trends in Lifetime Prevalence for Earlier Grade Levels
Based on Retrospective Reports from Seniors

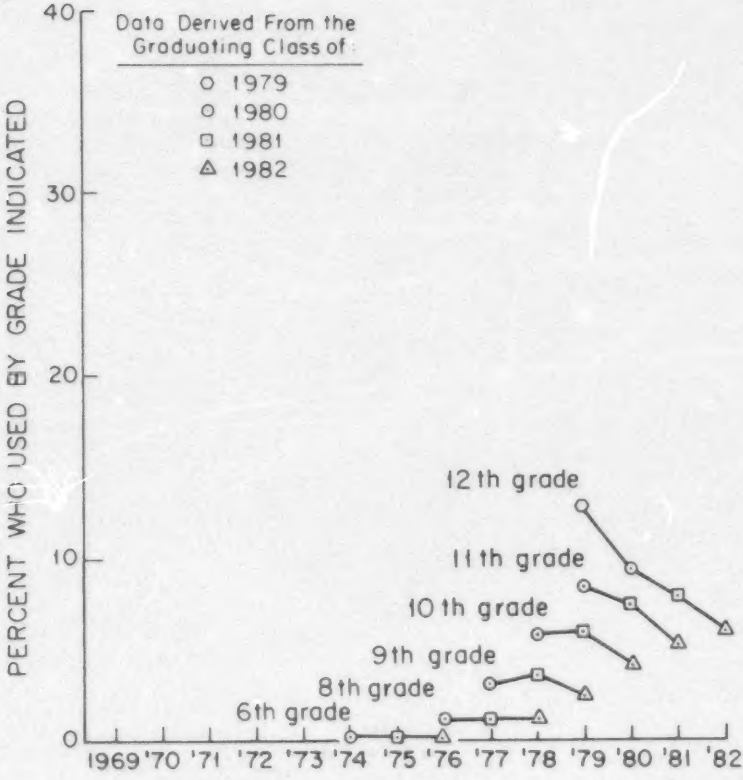

FIGURE J-9

Inhalants: Trends in Lifetime Prevalence for Earlier Grade Levels Based on Retrospective Reports from Seniors

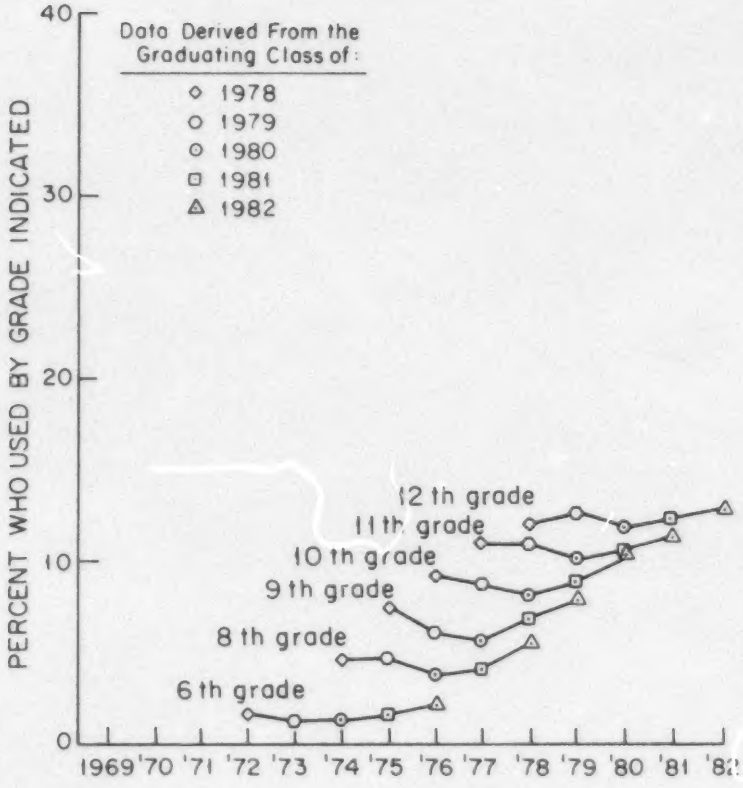

FIGURE J-10

Nitrites: Trends in Lifetime Prevalence for Earlier Grade Levels Based on Retrospective Reports from Seniors

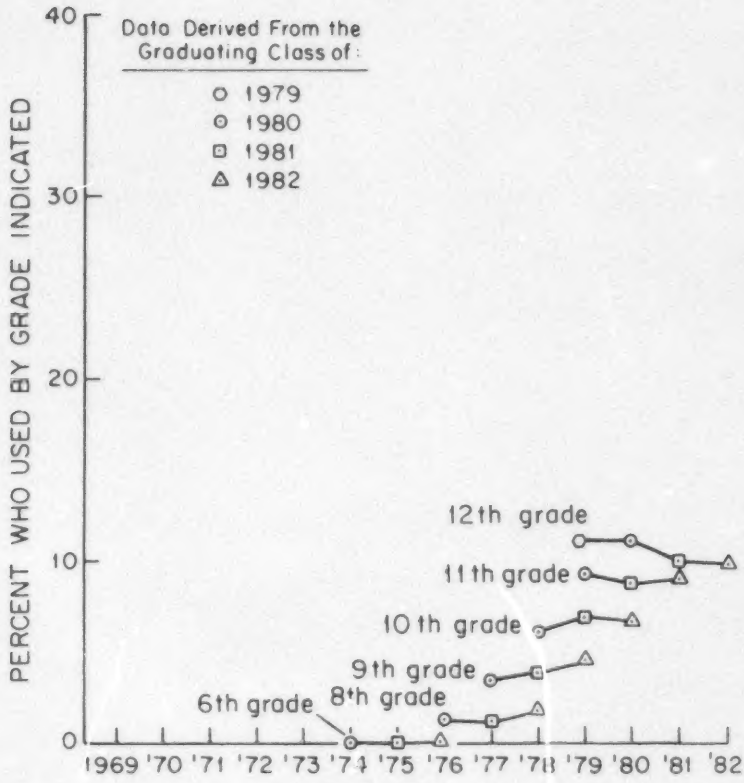

FIGURE J-11

Sedatives: Trends in Lifetime Prevalence for Earlier Grade Levels
Based on Retrospective Reports from Seniors

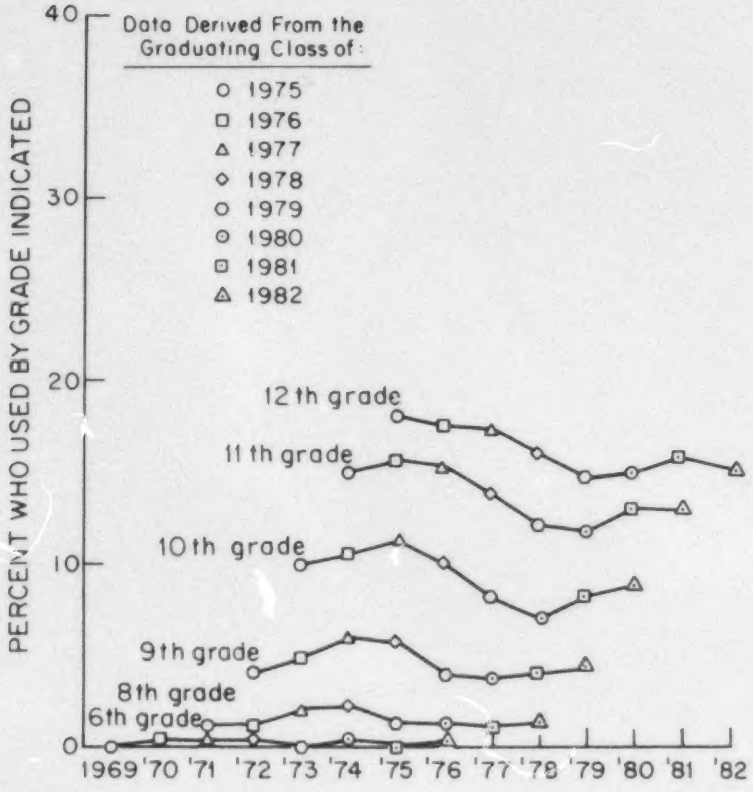

FIGURE J-12

Barbiturates: Trends in Lifetime Prevalence for Earlier Grade Levels
Based on Retrospective Reports from Seniors

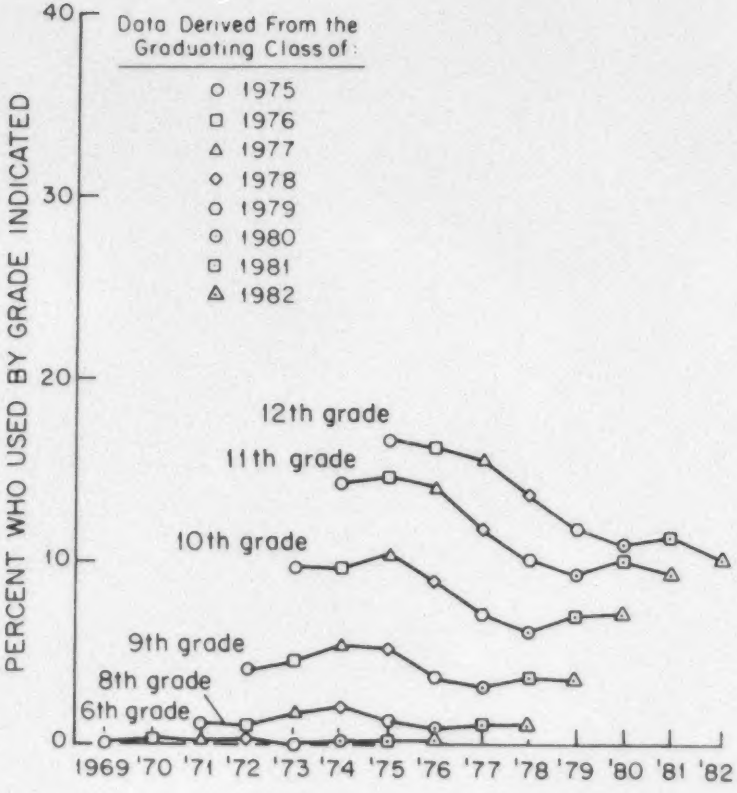

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FIGURE J-13

Methaqualone: Trends in Lifetime Prevalence for Earlier Grade Levels
Based on Retrospective Reports from Seniors

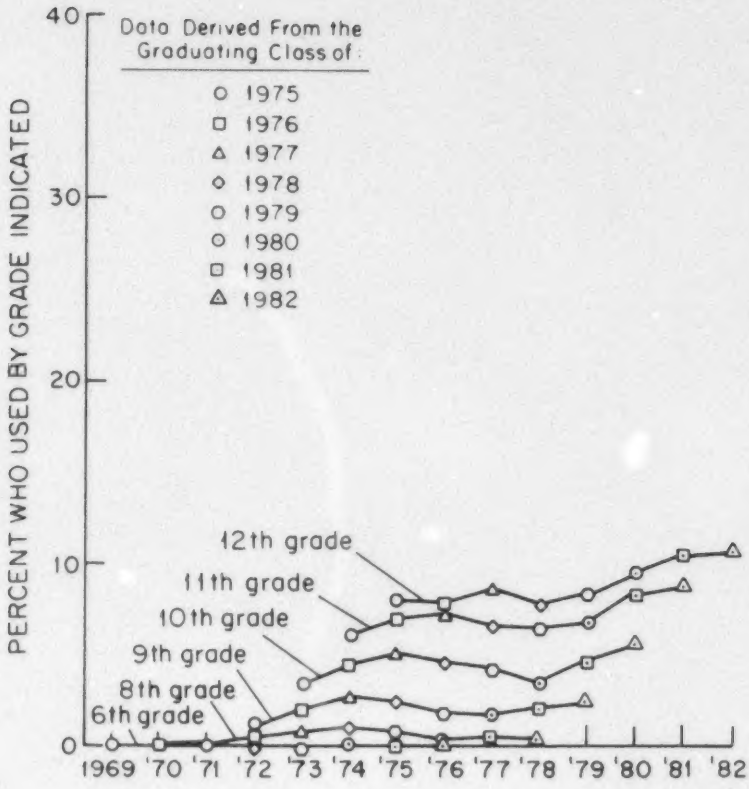

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FIGURE J-14

Tranquilizers: Trends in Lifetime Prevalence for Earlier Grade Levels
Based on Retrospective Reports from Seniors

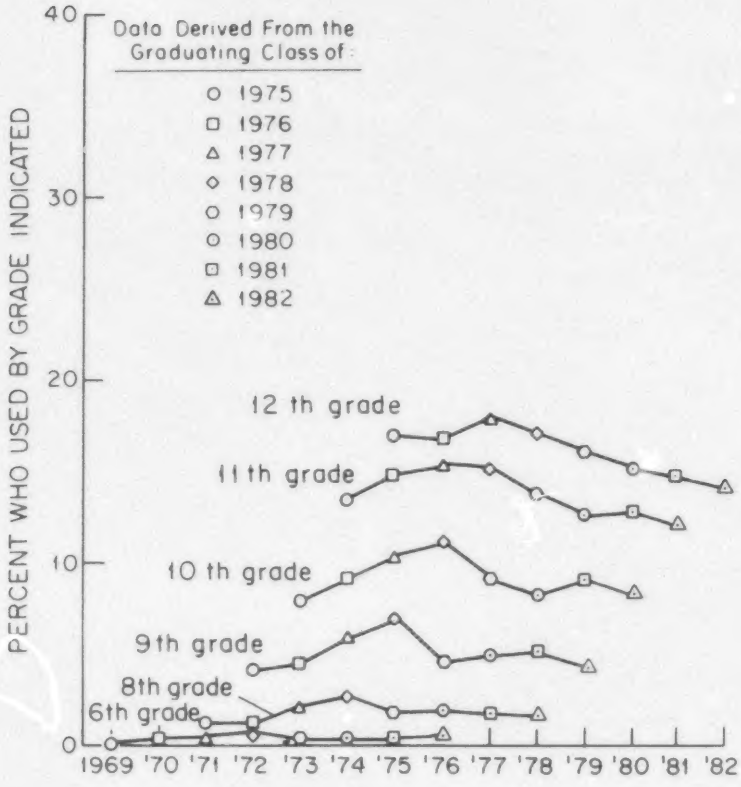


FIGURE J-15

Heroin: Trends in Lifetime Prevalence for Earlier Grade Levels
Based on Retrospective Reports from Seniors

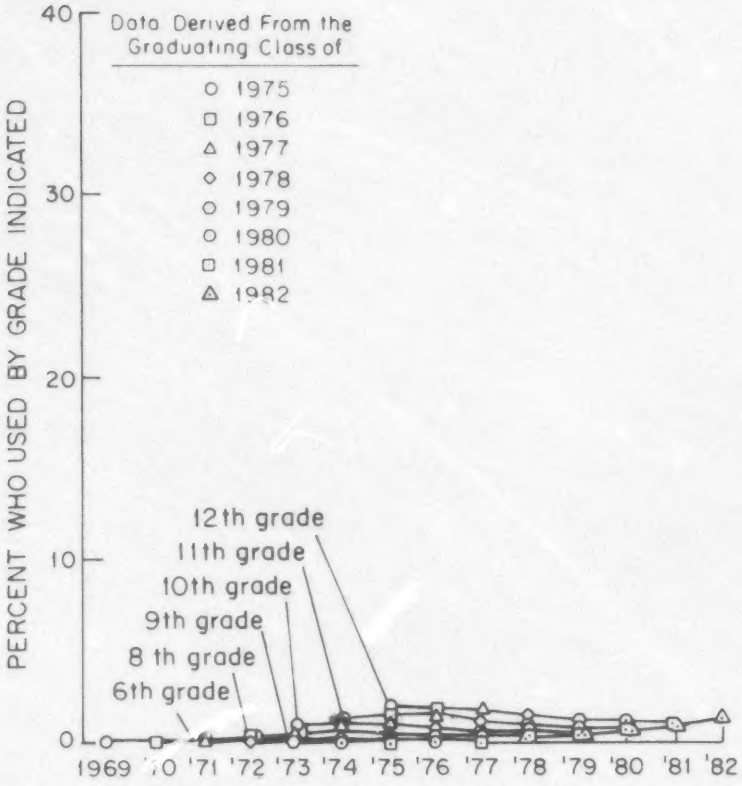


FIGURE J-16

Other Opiates: Trends in Lifetime Prevalence for Earlier Grade Levels
Based on Retrospective Reports from Seniors

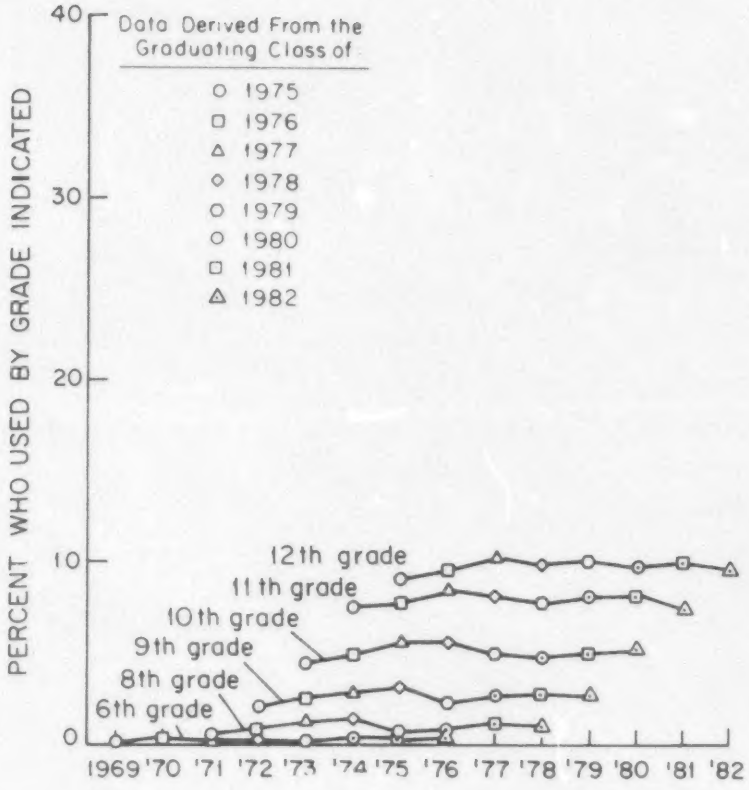


FIGURE J-17

Cigarettes: Trends in Lifetime Prevalence for Earlier Grade Levels
Based on Retrospective Reports from Seniors

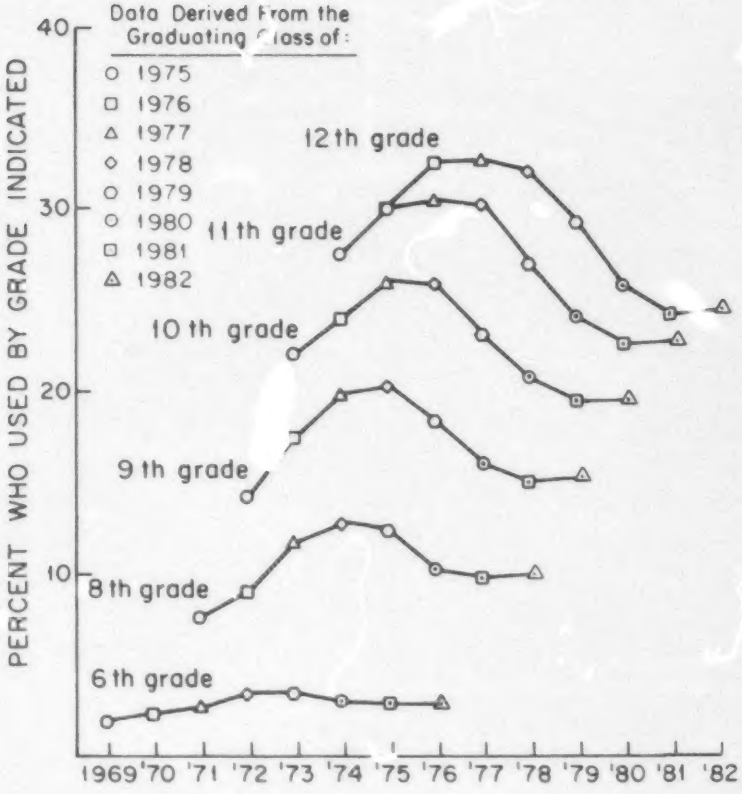
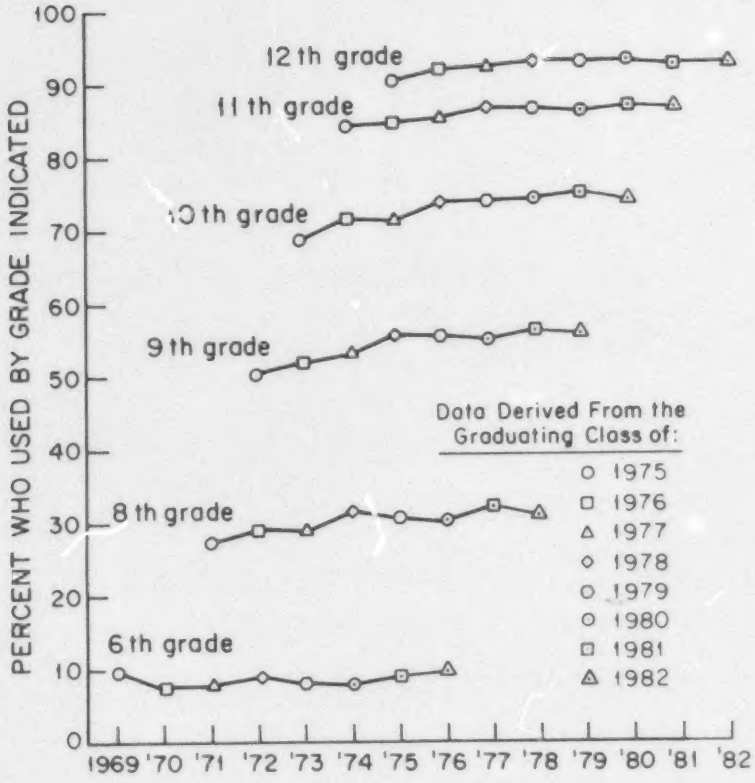


FIGURE J-18

Alcohol: Trends in Lifetime Prevalence for Earlier Grade Levels
Based on Retrospective Reports from Seniors



DEGREE AND DURATION OF HIGHS

On one of the five questionnaire forms, seniors who report use of a drug during the prior twelve months are asked how long they usually stay high and how high they usually get on that drug. These measures were developed both to help characterize the drug-using event and to provide indirect measures of dose or quantity of drugs consumed.

- Figure K shows the proportion of 1982 seniors who say that they usually get "not at all" high, "a little" high, "moderately" high, or "very" high when they use a given type of drug. The percentages are based on all respondents who report use of the given drug class in the previous twelve months, and therefore each bar cumulates to 100%. The ordering from left to right is based on the percentage of users of each drug who report that they usually get "very" high. (The width of each bar is proportional to the percentage of all seniors having used the drug class in the previous year; this should serve as a reminder that even though a large percentage of users of a drug may get very high, they may represent only a small proportion of all seniors.)

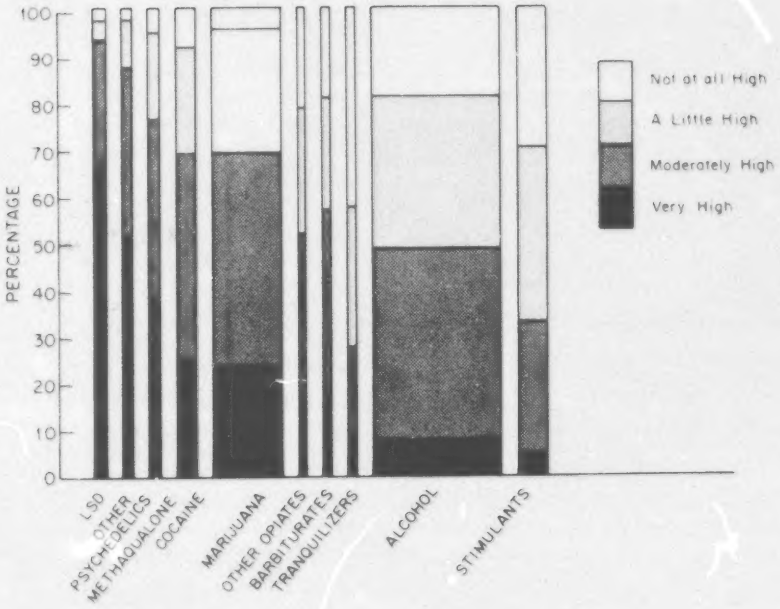
- The drugs which usually result in intense highs are the hallucinogens (LSD and other hallucinogens), heroin and methaqualone (Quaaludes). (Actually, heroin has been omitted from Figure K because of the small number of cases available for a given year, but an averaging across years indicates that it would rank very close to LSD.)

- Next come cocaine and marijuana, with about two-thirds of the users of each saying they usually get moderately high or very high when using the drug.

- The four major psychotherapeutic drug classes—barbiturates, opiates other than heroin, tranquilizers and stimulants—are less often used to

FIGURE K

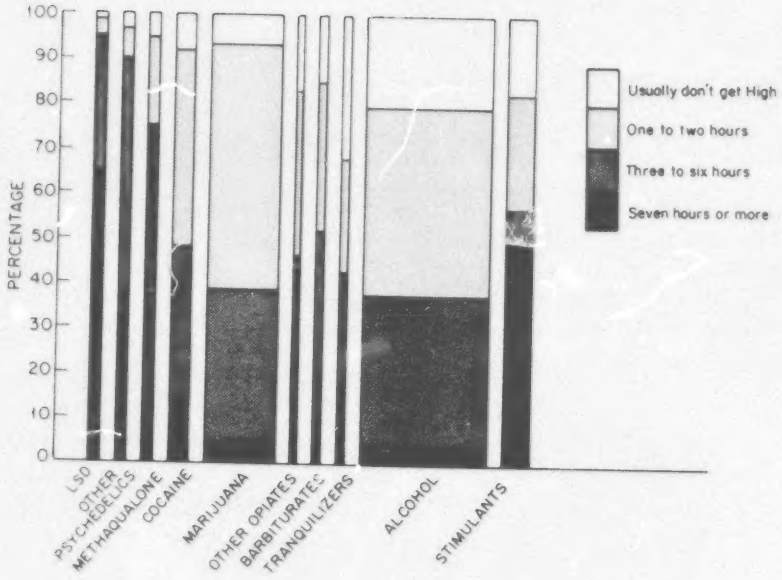
Degree of High Attained by Recent Users



NOTE: The width of each bar is proportionate to the number of seniors reporting any use of each drug in the prior 12 months. Heroin is not included in this figure because these particular questions are not asked of the small number of heroin users.

FIGURE L

Duration of High Attained by Recent Users



NOTE: The width of each bar is proportionate to the number of seniors reporting any use of each drug in the prior 12 months. Heroin is not included in this figure because these particular questions are not asked of the small number of heroin users.

get high; but substantial proportions of users (from 27% for tranquilizers to 57% for barbiturates) still say they usually get moderately or very high after taking these drugs.

- Relatively few of the many seniors using alcohol say that they usually get very high when drinking, although nearly half usually get at least moderately high. However, for a given individual we would expect more variability from occasion to occasion in the degree of intoxication achieved with alcohol than with most of the other drugs. Therefore, many drinkers surely get very high at least sometimes, even if that is not "usually" the case.

- Figure L presents the data on the duration of the highs usually obtained by users of each class of drugs. The drugs are arranged in the same order as for intensity of highs to permit an examination of the amount of correspondence between the degree and duration of highs.

- As can be seen in Figure L, those drugs which result in the most intense highs generally tend to result in the longest highs. For example, LSD, other hallucinogens, and methaqualone rank one through three respectively on both dimensions, with substantial proportions (from 17% to 64%) of the users of these drugs saying they usually stay high for seven hours or more. And alcohol ranks last on both dimensions; most users stay high for two hours or less.

- However, there is not a perfect correspondence between degree and duration of highs. The highs achieved with marijuana, although intense for many users, tend to be relatively short-lived in comparison with most other drugs. The majority of users usually stay high less than three hours, and the modal and median time is one to two hours.

- For cocaine users the modal high is one to two hours, though nearly as many stay high three to six hours. Longer highs are reported by 14%.

- The modal and median duration of highs for barbiturates and stimulants are three to six hours. Users of opiates other than heroin and tranquilizers report highs of slightly shorter duration.

- In sum, the drugs vary considerably in both the duration and degree of the highs usually obtained with them. (These data obviously do not address the qualitative differences in the experiences of being "high.") Sizeable proportions of the users of all of

these drugs report that they usually get high for at least three hours per occasion, and for a number of drugs appreciable proportions usually stay high for seven hours or more.

Trends in Degree and Duration of Highs

- There have been several important shifts over the last five years in the degree or duration of highs usually experienced by users of the various drugs.

- The average duration of the highs reported by LSD users seems to have declined somewhat. In 1975, 74% of the recent LSD users reported usually staying high seven hours or more; by 1981 this proportion had dropped to 58%, although it increased a bit this year (to 64%). The subjectively reported degree of high usually obtained has also dropped, from 79% of users saying "very high" in 1975 to 66% of users in 1981 (and 67% in 1982).

- For cocaine, the proportion who say they usually get high for only two hours or less has increased from 36% in 1977 to 51% in 1982, reflecting a substantial shortening in the average duration of highs. There has also been some modest decline in the average degree of high attained.

- For opiates other than heroin, there had been a fairly steady decline between 1975 and 1979 in both the intensity of the highs usually experienced and in the duration of those highs. In 1975, 39% said they usually got "very high" vs. 18% in 1[illegible]. The proportion usually staying high for seven or more hours dropped from 28% in 1975 to 13% in 1979. Since 1979, the degree and duration of highs experienced with this class of drugs has remained quite constant.

- Stimulants have shown a substantial decrease in the proportion of recent users usually getting very high or moderately high (down from 60% in 1975 to 33% in 1982). Consistent with this, the proportion of users saying they simply "don't take them to get high" increased from 9% in 1975 to 21% by 1982. In addition, the average reported duration of stimulant highs has been declining; 41% of the 1975 users said they usually stayed high seven or more hours vs. only 12% of the 1982 users.*

*The questionnaire form containing the questions on degree and duration of highs is one on which the amphetamine questions were clarified in 1982, to eliminate the inappropriate inclusion of non-prescription stimulants. One might have expected this change to have increased the degree and duration of highs reported, given that real amphetamines would be expected to have greater psychological impact on the average; but the trends still continued downward this year.

- These substantial decreases in both the degree and the duration of highs strongly suggest that there has been some shift in the purposes for which stimulants are being used. An examination of data on self-reported reasons for use tends to confirm this conclusion. The proportion of all seniors who reported both using "amphetamines" in the prior year and checking "to stay awake" as one of their reasons for use, rose from 8% in 1976 to 15% in 1981. There was also a similar pattern of increase in the proportion of all seniors who reported using "to lose weight" (up from 4% in 1976 to 10% in 1981) as well as a similar pattern for the proportion who checked "to get more energy" (up from 9% in 1976 to 15% in 1981). When the revised questions on amphetamines were introduced in 1982—making it more clear that look-alikes and over-the-counter drugs should be excluded—there still resulted higher proportions of all seniors in 1982 using for each of these instrumental reasons than in 1976 (i.e. 11% used to "stay awake" vs. 8% in 1976, 8% to "lose weight" vs. 4% in 1976, and 13% "get more energy" vs. 9% in 1976). However, these numbers are not as high as in 1981, since some of the seniors whose answers were included in the 1981 results must have been using non-prescription stimulants for these purposes. In sum, we conclude that there has been a distinct increase in the use of amphetamines for these non-recreational purposes—purposes which are among the most cited of all sixteen which might have been checked.

- There also, however, appears to have been at least some increase in recreational use as well, though clearly not as steep an increase as the trends in overall use might suggest. The data on exposure to people using amphetamines "to get high or for kicks", which will be discussed further in a section below, show a definite increase between 1976 and 1981 (there was a rise of 8% just between 1979 and 1981). There was no further increase in exposure to use for those purposes in 1982, however, suggesting that recreational use, as well as overall use, has leveled off.

- There is some evidence in the last two years that the degree and duration of highs usually achieved by barbiturate users and methaqualone users has been decreasing. The largest change has been in the duration of methaqualone highs, which dropped sharply in the last three or four years.

- For marijuana there had been some downward trending since 1978 in the degree of the highs usually obtained. In 1978, 27% of users said they usually get "very high"—a figure which dropped to 20% by 1981. This

year there was a slight (3%) reversal of this trend. There have also been some interesting changes taking place in the duration figures. Recall that most marijuana users say they usually stay high either one to two hours or three to six hours. Since 1975 there has been a steady shift in the proportions selecting each of these two categories: a lower proportion of recent users answered three to six hours in 1982 (34% vs. 45% in 1975) while a higher proportion answered one to two hours in 1982 (54% vs. 40% in 1975). Until 1979 this shift could have been due almost entirely to the fact that progressively more seniors were using marijuana; and the users in more recent classes, who would not have been users in earlier classes, probably tended to be relatively light users. We deduce this from the fact the percentage of all seniors reporting three-to-six-hour highs remained relatively unchanged from 1975 to 1979, while the percentage of all seniors reporting only one to two hour highs had been increasing steadily (from 16% in 1975 to 25% in 1979).

However, the overall prevalence rate did not increase over the past three years (annual prevalence actually dropped by 7%), but the shift toward shorter average highs continued. Thus we must attribute this recent shift to another factor, and the one which seems most likely is a general shift (even among the most marijuana-prone segment) toward a less frequent (or less intense) use of the drug. The drop in daily prevalence, over the last three years, which certainly is disproportionate to the drop in overall prevalence, is consistent with this interpretation. Also consistent is the fact that the average number of "joints" smoked per day (among those who reported any use in the prior year) has been dropping. In 1976, 65% of those reporting marijuana use in the prior year said they averaged less than 1 "joint" per day during the prior month vs. 74% in 1982 (data not shown).

In sum, not only are fewer high school students now using marijuana, but those who are using seem to be using less frequently and to be taking smaller doses per occasion.

- For hallucinogens other than LSD, taken as a class, there has been a very slight decline since 1975 in the degree and duration of highs usually experienced.

- There are no clearly discernible patterns in the intensity or duration of the highs being experienced with the remaining classes of drugs on which we have the relevant data—i.e., tranquilizers, and alcohol. (Data have not been collected for highs experienced in the use of inhalants, the nitrites specifically, or PCP specifically; and the number of admitted heroin users on a single questionnaire form is inadequate to estimate trends reliably.)

ATTITUDES AND BELIEFS ABOUT DRUGS

This section presents the cross-time results for three sets of attitude and belief questions. One set concerns how harmful the students think various kinds of drug use would be for the user, the second concerns how much they personally disapprove of various kinds of drug use, and the third asks about attitudes on the legality of using various drugs under different conditions. (The next section deals with the closely related topics of parents' and friends' attitudes about drugs, as the seniors perceive them.)

As the data below show, overall percentages disapproving various drugs, and the percentages believing their use to involve serious risk, both tend to parallel the percentages of actual users. Thus, for example, of the illicit drugs marijuana is the most frequently used and the least likely to be seen as risky to use. This and many other such parallels suggest that the individuals who use a drug are less likely to disapprove use of it or to view its use as involving risk. A series of individual-level analyses of these data confirms this conclusion: strong correlations exist between individual use of drugs and the various attitudes and beliefs about those drugs. Those seniors who use a given drug also are more likely to approve its use, downplay its risks, and report their own parents and friends as being at least somewhat more accepting of its use.

The attitudes and beliefs about drug use reported below have been changing during recent years, along with actual behavior. In particular, views about marijuana use, and legal sanctions against use, have shown important trends.

Beginning in 1979, scientists, policy makers, and in particular the electronic and printed media, have given considerable attention to the increasing levels of regular marijuana use among young people, and to the potential hazards associated with such use. As will be seen below, over the last four years attitudes about regular use of marijuana have shifted dramatically in a more conservative direction—a shift which coincides with a reversal in the previous rapid rise of daily use, and which very likely reflects the impact of this increased public attention.

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Perceived Harmfulness of Drugs

Beliefs in 1982 about Harmfulness

- A substantial majority of high school seniors perceive regular use of any of the illicit drugs, as entailing "great risk" of harm for the user (see Table 11). Some 86% of the sample feel this way about heroin—the highest proportion for any of these drugs—while 84% associate great risk with using LSD. The proportions attributing great risk to amphetamines, barbiturates, and cocaine are 65%, 68%, and 73% respectively.

- Regular use of cigarettes (i.e., one or more packs a day) is judged by the majority (61%) as entailing a great risk of harm for the user.

- Regular use of marijuana is judged to involve great risk by 60% of the sample, the same proportion as judge cigarette smoking to involve great risk.

- Regular use of alcohol was more explicitly defined in several questions. Very few (22%) associate much risk of harm with having one or two drinks almost daily. Only about a third (36%) think there is great risk involved in having five or more drinks once or twice each weekend. Considerably more (66%) think the user takes a great risk in consuming four or five drinks nearly every day, as would be expected.

- Compared with the above perceptions about the risks of regular use of each drug, many fewer respondents feel that a person runs a "great risk" of harm by simply trying the drug once or twice.

- Very few think there is much risk in using marijuana experimentally (12%) or even occasionally (18%).

- Experimental use of the other illicit drugs, however, is still viewed as risky by a substantial proportion. The percentage associating great risk with experimental use ranges from about 25% for amphetamines and barbiturates to 51% for heroin.

- Practically no one (4%) believes there is much risk involved in trying an alcoholic beverage once or twice.

Trends in Perceived Harmfulness

- Several very important trends have been taking place in recent years in these beliefs about the dangers associated with using various drugs (see Table 11 and Figures M and N).

TABLE 11

Trends in Perceived Harmfulness of Drugs

Q. How much do you think people risk harming themselves (physically or in other ways), if they...	Percent saying "great risk"[a]								
	Class of 1975	Class of 1976	Class of 1977	Class of 1978	Class of 1979	Class of 1980	Class of 1981	Class of 1982	'81-'82 change
Try marijuana once or twice	13.1	11.4	9.5	8.1	9.4	10.0	13.0	11.5	-1.5
Smoke marijuana occasionally	18.1	15.0	13.4	12 6	13.5	16.7	19.1	18.3	-0 8
Smoke marijuana regularly	43.3	38.6	36.4	36.9	42.0	50.4	57.6	60.6	+2 8
Try LSD once or twice	69.4	65.7	63.2	62.7	61.6	63.9	65.5	64.9	-0.6
Take LSD regularly	81.4	80.8	79.1	81.1	82.4	83.0	83.5	83.5	0.0
Try cocaine once or twice	42.6	39.1	35.6	33 2	31.5	31.3	32.1	32 8	+0.7
Take cocaine regularly	73.1	72.3	68.2	68.2	69.5	69.2	71 2	73 0	+1.8
Try heroin once or twice	60.1	58.9	55.8	57 9	50 6	52.1	52 9	51.1	-1.8
Take heroin occasionally	75.6	75.6	71.9	71.6	70 9	70.9	72 2	69.8	-2 4
Take heroin regularly	87.2	88.6	86.1	86.6	87.5	86.2	87.5	86.0	-1.5
Try amphetamines once or twice	35.4	33.4	30.8	29.9	29.7	29.7	26.4	25.3	-1.1
Take amphetamines regularly	69.0	67.3	66.6	67.1	69.9	69.1	66.1	64.7	-1.4
Try barbiturates once or twice	36.8	32.5	31.2	31 3	30.7	30.9	28.4	27.5	-0 9
Take barbiturates regularly	69.1	67.7	68.6	68.4	71 6	72.2	69.9	67.6	-2.3
Try one or two drinks of an alcoholic beverage (beer, wine, liquor)	5.3	4.8	4.1	3.6	4.1	3 8	4.6	3.5	-1.1
Take one or two drinks nearly every day	21.5	21.2	18.5	19.6	22 6	20.3	21.6	21.6	0.0
Take four or five drinks nearly every day	63.5	61.0	62.9	63 1	66.2	65.7	64.5	65.5	+1.0
Have five or more drinks once or twice each weekend	37.8	37.0	34.7	34 5	34.9	35.9	36.3	36.0	-0.3
Smoke one or more packs of cigarettes per day	31.3	36.4	38.4	39.0	43.0	43.7	43.3	40.5	-2.8s
Approx. N =	(2804)	(3225)	(3570)	(3770)	(3250)	(3234)	(3604)	(3557)	

NOTE: Level of significance of difference between the two most recent classes:
s = .05, ss = .01, sss = .001.

[a]Answer alternatives were: (1) No risk, (2) Slight risk, (3) Moderate risk, (4) Great risk, and (5) Can't say, Drug unfamiliar.

- One of the most important involves marijuana (Figure M). From 1975 through 1978 there had been a decline in the harmfulness perceived to be associated with all levels of marijuana use; but in 1979, for the first time, there was an increase in these proportions—an increase which has continued fairly steadily since then. By far the most impressive increase has occurred for regular marijuana use, where there has been a full 25% jump in just four years in the proportion perceiving it as involving great risk—i.e., from 35% in 1978 to 60% in 1982. This is a dramatic change, and it has occurred during a period in which a substantial amount of scientific and media attention has been devoted to the potential dangers of heavy marijuana use. There is evidence, however, of this trend ending—perhaps in 1983—judging by the decelerated rate of increase this year.

- There also has been an important increase over a longer period in the number who think pack-a-day cigarette smoking involves great risk to the user (from 51% in 1975 to 64% in 1980). This shift corresponded with, and to some degree preceded, the downturn in regular smoking found in this age group (see Figure M). But last year this statistic showed no further increase (presaging the end of the decline in use this year), and in 1982 perceived harmfulness actually dropped several percent as use began to rise again.

- From 1975 to 1979 there had been a modest but consistent trend in the direction of fewer students associating much risk with experimental or occasional use of most of the other illicit drugs (Table 11 and Figure N). This trend has continued since only for amphetamines and barbiturates. Otherwise, there has been little change over the last two or three years and, if anything, even a slight reversal of previous trends.

- The percentage who perceived great risk in trying cocaine once or twice dropped from 43% in 1975 to 31% in 1980, which generally corresponds to a period of rapidly increasing use. But perceived risk has been inching upward over the last two years. The proportion seeing great risk in regular cocaine use also dropped somewhat from 1975 to 1977 and remained fairly level until 1980; but since then it has risen about 4%. This recent increase in health concern parallels rather closely the recent leveling, and now the modest decline, in actual use. (It should be recalled that during this recent period two popular entertainment figures suffered tragic results in connection with their cocaine use.)

FIGURE M

Trends in Perceived Harmfulness: Marijuana and Cigarettes

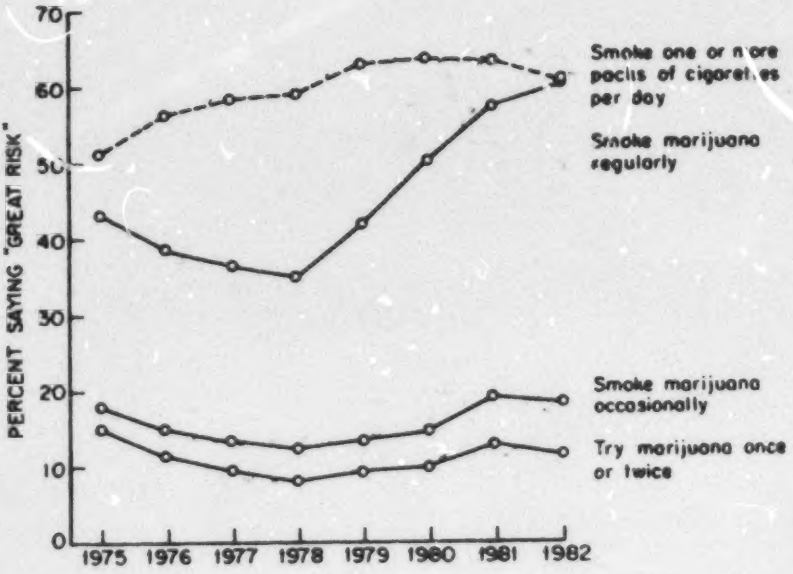
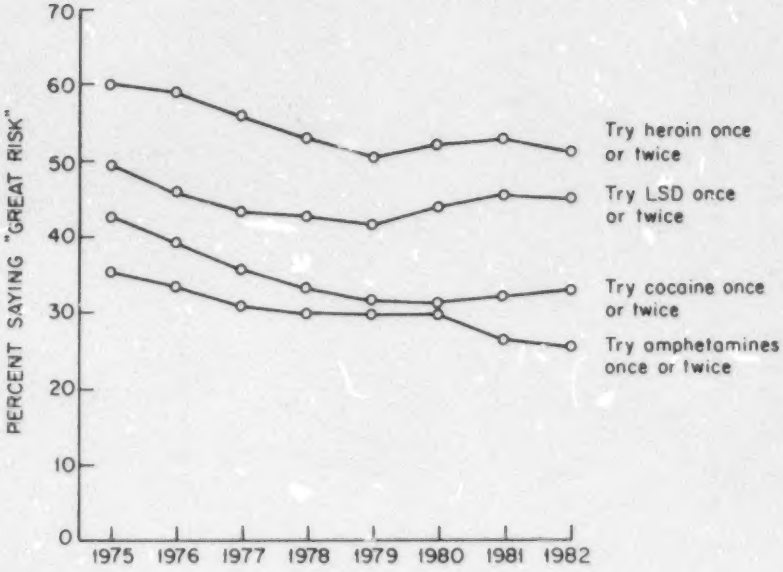


FIGURE N

Trends in Perceived Harmfulness: Other Drugs



- In sum, there has been a sharp reversal in young people's concerns about regular marijuana use—one which began to occur in 1979—and since then there has been a more modest reversal in concerns about less frequent use of that drug and in concerns about experimenting with most other illicit drugs, as well.

- Attitudes concerning the risk associated with alcohol use at various levels have remained essentially unchanged over the past seven years.

Personal Disapproval of Drug Use

A different set of questions was developed to try to measure any general moral sentiment attached to various types of drug use. The phrasing, "Do you disapprove of people (who are 18 or older) doing each of the following" was adopted.

Extent of Disapproval in 1982

- The great majority of these students do not condone regular use of any of the illicit drugs (see Table 12). Even regular marijuana use is disapproved by 81%, and regular use of each of the other illicits receives disapproval from between 91% and 98% of today's high school seniors.

- Smoking a pack (or more) of cigarettes per day receives the disapproval of nearly 70% of the age group.

- Drinking at the rate of one or two drinks daily also receives disapproval from 70% of the seniors. A curious finding is that weekend binge drinking (five or more drinks once or twice each weekend) is acceptable to more seniors than is moderate daily drinking. While only 59% disapprove of having five or more drinks once or twice a weekend, 70% disapprove of having one or two drinks daily. This is in spite of the fact that they associate greater risk with weekend binge drinking (36%) than with the daily drinking (22%). One possible explanation for these seemingly inconsistent findings may stem from the fact that a greater proportion of this age group are themselves weekend binge drinkers rather than regular daily drinkers. They have thus expressed attitudes accepting of their own behavior, even though they may be somewhat inconsistent with their beliefs about possible consequences.

- For each of the drugs included in the question, fewer people indicate disapproval of experimental or occasional use than of regular use, as would be expected. The differences are not great, however, for

TABLE 12

Trends in Proportions Disapproving of Drug Use

Q. *Do you disapprove of people (who are 18 or older) doing each of the following?*[b]	Percent "disapproving"[a]								
	Class of 1975	Class of 1976	Class of 1977	Class of 1978	Class of 1979	Class of 1980	Class of 1981	Class of 1982	'81-'82 change
Try marijuana once or twice	47.0	38.4	33.4	33.4	34.2	39.0	40.0	45.5	+5.5ns
Smoke marijuana occasionally	58.8	47.8	44.3	43.5	43.3	49.7	52.6	59.1	+6.5ns
Smoke marijuana regularly	71.9	69.5	65.5	67.5	69.2	74.6	77.4	80.6	+3.2ns
Try LSD once or twice	82.8	84.6	83.9	85.4	86.6	87.3	86.4	88.8	+2.4s
Take LSD regularly	94.1	95.3	95.8	96.4	96.9	96.7	96.8	96.7	-0.1
Try cocaine once or twice	81.3	82.4	79.1	77.0	76.7	76.3	79.6	76.6	+2.0
Take cocaine regularly	93.3	93.9	92.1	91.9	90.8	91.1	90.7	91.5	+0.8
Try heroin once or twice	91.5	92.6	92.5	92.0	93.4	93.5	93.5	94.6	+1.1
Take heroin occasionally	94.8	96.0	96.0	96.4	96.8	96.7	97.2	96.9	-0.3
Take heroin regularly	96.7	97.5	97.2	97.8	97.9	97.6	97.8	97.5	-0.3
Try amphetamines once or twice	74.8	75.1	74.2	74.8	73.1	73.4	71.1	72.6	+1.5
Take amphetamines regularly	92.1	92.8	92.5	93.5	94.4	93.0	91.7	92.0	+0.3
Try barbiturates once or twice	77.7	81.3	81.1	82.4	84.0	83.9	82.4	84.4	+2.0
Take barbiturates regularly	93.3	93.6	93.0	94.3	95.2	95.4	94.2	94.4	+0.2
Try one or two drinks of an alcoholic beverage (beer, wine, liquor)	21.6	18.2	15.6	15.6	15.8	16.0	17.2	18.2	+1.0
Take one or two drinks nearly every day	67.6	68.9	66.8	67.7	68.3	69.0	69.1	69.9	+0.8
Take four or five drinks nearly every day	88.7	90.7	88.4	90.2	91.7	91.3	91.8	90.9	-0.9
Have five or more drinks once or twice each weekend	60.3	54.6	57.4	56.2	56.7	55.6	55.5	58.8	+3.3s
Smoke one or more packs of cigarettes per day	67.5	65.9	66.4	67.0	70.3	70.8	69.9	69.4	-0.5
Approx. N =	(2677)	(3234)	(3382)	(3686)	(3221)	(3261)	(3610)	(3651)	

NOTE: Level of significance of difference between the two most recent classes:
s = .05, ss = .01, sss = .001.

[a]Answer alternatives were: (1) Don't disapprove, (2) Disapprove, and (3) Strongly disapprove. Percentages are shown for categories (2) and (3) combined.

[b]The 1975 question asked about people who are "20 or older."

the illicit drugs other than marijuana. For example, 77% disapprove experimenting with cocaine vs. 92% who disapprove its regular use.

- For marijuana, however, the rate of disapproval varies substantially for different usage habits. Less than half of all seniors (46%) disapprove of trying marijuana, yet the great majority (81%) disapprove of regular use.

Trends in Disapproval

- Between 1975 and 1977 there occurred a substantial decrease in disapproval of marijuana use at any level of frequency (see Table 12 and Figure O). About 14% fewer seniors in the class of 1977 (compared with the class of 1975) disapproved of experimenting, 11% fewer disapproved of occasional use, and 6% fewer disapproved of regular use. Since 1977, however, there has been a substantial reversal of that trend, with disapproval of experimental use having risen by 12%, disapproval of occasional use by 15%, and disapproval of regular use by 15%. These changes are continuing again this year. A good portion of the increase in disapproval of experimental and occasional use occurred in just the past year. See Figure O.

- Until 1980 the proportion of seniors who disapproved trying amphetamines had remained extremely stable (at 75%). In 1981 there was a 4% drop, but disapproval is back to 73% in 1982.

- During recent years personal disapproval for experimenting with barbiturates has been increasing (from 78% in 1975 to 84% in 1979). This long-term trend halted in 1980 and 1981, but picked up again this year. Over recent years disapproval for regular cigarette smoking had been increasing modestly (from 66% in 1976 to 71% in 1980). However, disapproval has dropped slightly since 1980.

- Disapproval of experimental use of cocaine had declined somewhat, from a high of 82% in 1976 down to 75% in 1979. But in the last three years, disapproval has leveled. (Actual use of cocaine has also leveled and this year shown some signs of decline.)

- There has been relatively little change in attitudes regarding alcohol use, with two exceptions. The small minority who disapprove of trying alcohol once or twice (22% in 1975) had become even smaller by 1977 (16%). It remained relatively unchanged until 1980 (16%), but has begun to inch up since (18% in 1982). There was also a slight softening of attitudes regarding

TABLE 13

Trends in Attitudes Regarding Legality of Drug Use

Q. *Do you think that people (who are 18 or older) should be prohibited by law from doing each of the following?*[b]	Percent saying "yes"[a]								
	Class of 1975	Class of 1976	Class of 1977	Class of 1978	Class of 1979	Class of 1980	Class of 1981	Class of 1982	'81-'82 change
Smoke marijuana in private	32.8	27.5	26.8	25.4	28.0	28.9	35.4	36.6	+1.2
Smoke marijuana in public places	63.1	59.1	58.7	59.5	61.8	66.1	67.4	72.8	+5.4ss
Take LSD in private	67.2	65.1	63.3	62.7	62.4	65.8	62.6	67.1	+4.5ss
Take LSD in public places	85.8	81.9	79.3	80.7	81.5	82.8	80.7	82.1	+1.4
Take heroin in private	76.3	72.4	69.2	68.8	68.5	70.3	68.8	69.3	+0.5
Take heroin in public places	90.1	86.8	81.0	82.5	84.0	83.8	82.4	82.5	+0.1
Take amphetamines or barbiturates in private	57.2	53.5	52.8	52.2	53.4	54.1	52.0	53.5	+1.5
Take amphetamines or barbiturates in public places	79.6	76.1	73.7	73.8	77.3	76.1	76.2	75.5	+1.3
Get drunk in private	16.1	15.6	18.6	17.4	16.8	16.7	19.6	19.4	-0.2
Get drunk in public places	35.7	30.7	49.0	30.3	30.4	48.3	49.1	30.7	+1.6
Smoke cigarettes in certain specified public places	NA	NA	42.0	42.2	43.1	42.8	43.0	42.0	-1.0
Approx. N =	(2620)	(3265)	(3629)	(3783)	(3288)	(3224)	(3611)	(3627)	

NOTE: Level of significance of difference between the two most recent classes:
s = .05, ss = .01, sss = .001.

[a]Answer alternatives were: (1) No, (2) Not sure, and (3) Yes.

[b]The 1975 question asked about people who are "20 or older."

binge drinking, with disapproval dropping from 60% in 1975 to 56% in 1978; but this year for the first time there was an increase in disapproval for this behavior, perhaps reflecting the growing public concern about drunk driving.

Attitudes Regarding the Legality of Drug Use

Since the legal restraints on drug use appeared likely to be in a state of flux for some time, we decided at the beginning of the study to measure attitudes about legal sanctions. Table 13 presents a statement of one set of general questions on this subject along with the answers provided by each senior class. The set lists a sampling of illicit and licit drugs and asks whether their use should be prohibited by law. A distinction is consistently made between use in public and use in private—a distinction which proved quite important in the results.

Attitudes in 1982

- Most (73%) favor legally prohibiting marijuana use in public places, despite the fact that the majority have used marijuana themselves; but only about half as many (37%) feel that way about marijuana use in private.

- In addition, the great majority believe that the use in public of other illicit drugs than marijuana should be prohibited by law (e.g., 76% in the case of amphetamines and barbiturates, 83% for heroin).

- Fully 42% believe that cigarette smoking in public places should be prohibited by law—almost as many as think getting drunk in such places should be prohibited (51%).

- For all drugs, substantially fewer students believe that use in private settings should be illegal.

Trends in These Attitudes

- From 1975 through 1977 there was a modest decline (from 4% to 9%, depending on the substance) in the proportion of seniors who favored legal prohibition of private use of any of the illicit drugs. Now, however, the evidence suggests that these downward trends have halted and in some cases reversed.

- Over the past three years (from 1979 to 1982) there has been a sharp jump in the proportion favoring legal prohibition of marijuana use, either in private (up from 28% to 37%) or in public (up from 62% to 73%).

TABLE 14

Trends in Attitudes Regarding Marijuana Laws

(Entries are percentages)

	Class of 1975	Class of 1976	Class of 1977	Class of 1978	Class of 1979	Class of 1980	Class of 1981	Class of 1982
Q. There has been a great deal of public debate about whether marijuana use should be legal. Which of the following policies would you favor?								
Using marijuana should be entirely legal	27.3	32.6	33.6	32.9	32.1	26.3	23.1	20.0
It should be a minor violation like a parking ticket but not a crime	25.3	29.0	31.4	30.2	30.1	30.9	29.3	28.2
It should be a crime	30.5	25.4	21.7	22.2	24.0	26.4	32.1	34.7
Don't know	16.8	13.0	13.4	14.6	13.8	16.4	15.4	17.1
N =	(2617)	(3264)	(3622)	(3721)	(3278)	(3211)	(3593)	(3615)
Q. If it were legal for people to USE marijuana, should it also be legal to SELL marijuana?								
No	27.8	23.0	22.5	21.8	22.9	25.0	27.7	29.3
Yes, but only to adults	37.1	49.8	52.1	55.6	53.2	51.8	48.6	46.2
Yes, to anyone	16.2	13.3	12.7	12.0	11.3	9.6	10.5	10.7
Don't know	18.9	13.9	12.7	12 6	12.6	13.6	13.2	13.8
N =	(2616)	(3279)	(3628)	(3719)	(3280)	(3210)	(3599)	(3619)
Q. If marijuana were legal to use and legally available, which of the following would you be most likely to do?								
Not use it, even if it were legal and available	53.2	50.4	50.6	46.4	50.2	53.3	55.2	60.0
Try it	8.2	8.1	7.0	7.1	6.1	6 8	6.0	6.3
Use it about as often as I do now	22.7	24.7	26.8	30.9	29.1	27.3	24.8	21.7
Use it more often than I do now	6.0	7.1	7.4	6.3	6.0	4.2	4.7	3.8
Use it less than I do now	1.3	1.5	1.5	2.7	2.5	2.6	2.5	2.2
Don't know	8.5	8.1	6.6	6.7	6.1	5.9	6.9	6.0
N =	(2602)	(3272)	(3625)	(3711)	(3277)	(3210)	(3598)	(3618)

- There was also an increase this year in the proportion favoring prohibition of private use of LSD (up 4.5% to 67% in 1982).

The Legal Status of Marijuana

Another set of questions goes into more detail about what legal sanctions, if any, students think should be attached to the use and sale of marijuana. Respondents also are asked to guess how they would be likely to react to legalized use and sale of the drug. While the answers to such a question must be interpreted cautiously, we think it worth exploring how young people think they might respond to such changes in the law. (The questions and responses are shown in Table 14.)

Attitudes and Predicted Response to Legalization: 1982

- Only about one-fifth of all seniors believe marijuana use should be entirely legal (20%). About three out of ten (28%) feel it should be treated as a minor violation—like a parking ticket—but not as a crime. Another 17% indicate no opinion, leaving about one-third (35%) who feel it still should be a crime. In other words, of those expressing an opinion, a majority believe that marijuana use should not be treated as a criminal offense.

- Asked whether they thought it should be legal to sell marijuana if it were legal to use it, a majority (57%) said "yes." However, nearly all of these respondents would permit sale only to adults, thus suggesting more conservatism on this subject than might generally be supposed.

- High school seniors predict that they would be little affected by the legalization of either the sale or the use of marijuana. Fully 60% of the respondents say that they would not use the drug even if it were legal to buy and use, and another 24% indicate they would use it about as often as they do now or less. Only 4% say they would use it more often than at present and only another 6% say they would try it. Some 6% say they do not know how they would react.

Trends in Attitudes and Predicted Responses

- Between 1976 and 1979 seniors' preferences for decriminalization or legalization remained fairly constant; but in the past three years there was a sharp drop in the proportion favoring outright legalization (down from 32% in 1979 to 20% in 1982), while there was a corresponding increase in the proportion saying marijuana use should be a crime.

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- Also reflecting the recent increased conservatism about marijuana, somewhat fewer now would support legalized sale even if use were to be made legal (down from 65% in 1979 to 57% in 1982).

- The predictions about personal marijuana use, if sale and use were legalized, have been quite similar for all seven high school classes. The slight shifts being observed are mostly attributable to the changing proportions of seniors who actually use marijuana.

THE SOCIAL MILIEU

The preceding section dealt with seniors' attitudes about various forms of drug use. Attitudes about drugs, as well as drug-related behaviors, obviously do not occur in a social vacuum. Drugs are discussed in the media; they are a topic of considerable interest and conversation among young people; they are also a matter of much concern to parents, concern which often is strongly communicated to their children. Young people are known to be affected by the actual drug-taking behaviors of their friends and acquaintances, as well as by the availability of the various drugs. This section presents data on several of these relevant aspects of the social milieu.

We begin with two sets of questions about parental and peer attitudes, questions which closely parallel the questions about respondents' own attitudes about drug use, discussed in the preceding section. Since parental attitudes are now included in the survey only intermittently, those discussed here are based on the 1979 results.

Perceived Attitudes of Parents and Friends

Perceptions of Parental Attitudes

- Based on our most recent (1979) measures of perceived parental attitudes, a large majority of seniors feel that their parents would disapprove or strongly disapprove of their exhibiting any of the drug use behaviors shown in Table 15. (The data for the perceived parental attitudes are not tabulated, but are displayed in Figures O and P.)

- Over 97% of seniors said that their parents would disapprove or strongly disapprove of their smoking marijuana regularly, even trying LSD or amphetamines, or having four or five drinks every day. (Although the questions did not include more frequent use of LSD or amphetamines, or any use of heroin, it is obvious that if such behaviors were included in the list virtually all seniors would indicate parental disapproval.)

TABLE 15

Trends in Proportion of Friends Disapproving of Drug Use

Q. How do you think your close friends feel (or would feel) about you. . .	Adjustment Factor	Percent saying friends disapprove[a] Class of 1975[b]	Class of 1976	Class of 1977[b]	Class of 1978	Class of 1979[b]	Class of 1980	Class of 1981	Class of 1982	'81-'82 change
Trying marijuana once or twice	(-0.5)	44.3	NA	47.8	NA	40.9	42.6	46.4	50.3	+3.9s
Smoking marijuana occasionally	(+0.8)	54.8	NA	49.0	NA	48.2	50.6	55.9	57.4	+1.5
Smoking marijuana regularly	(+4.6)	75.0	NA	69.1	NA	70.2	72.0	75.0	74.7	-0.3
Trying LSD once or twice	(+9.0)	86.6	NA	86.6	NA	87.8	87.4	86.5	87.8	+1.3
Trying an amphetamine once or twice	(+8.0)	78.8	NA	80.3	NA	81.0	78.9	74.4	75.7	+1.3
Taking one or two drinks nearly every day	(+7.8)	67.2	NA	73.0	NA	71.0	70.3	69.5	71.9	+2.4
Taking four or five drinks every day	(+8.3)	89.2	NA	88.1	NA	88.5	87.9	86.4	86.6	+0.2
Having five or more drinks once or twice every weekend	(+4.7)	56.0	NA	53.4	NA	51.3	50.6	50.3	51.2	+0.9
Smoking one or more packs of cigarettes per day	(+8.3)	68.4	NA	68.3	NA	72.4	74.4	73.8	70.3	-3.5s
Approx. N =		(2488)	(NA)	(2971)	(NA)	(2716)	(2766)	(3120)	(3024)	

NOTE: NA indicates question not asked.

[a]Answer alternatives were: (1) Not disapprove, (2) Disapprove, and (3) Strongly disapprove. Percentages are shown for categories (2) and (3) combined.

[b]These figures have been adjusted by the factors reported in the first column because of lack of comparability of question-context among administrations. (See text for discussion.)

- While respondents feel that marijuana use would receive the least parental disapproval of all of the illicit drugs, even experimenting with it still is seen as a parentally disapproved activity by the great majority of the seniors (85%). Assuming that the students are generally correct about their parents' attitudes, these results clearly show that there remains a rather massive generational difference of opinion about this drug.

- Also likely to be perceived as rating high parental disapproval (around 92% disapproval) are occasional marijuana use, taking one or two drinks nearly every day, and pack-a-day cigarette smoking.

- Slightly lower proportions of seniors (85%) think their parents would disapprove of their having five or more drinks once or twice every weekend. This happened to be exactly the same percentage as said that their parents would disapprove of simply experimenting with marijuana.

- There is no reason to think that parental attitudes have softened in the intervening period. If anything the opposite seems more likely to be the case, given the rising public concern about marijuana and cocaine and the burgeoning parents' movement against drugs.

Current Perceptions of Friends' Attitudes

- A parallel set of questions asked respondents to estimate their friends' attitudes about drug use (Table 15). These questions ask "How do you think your close friends feel (or would feel) about you ...." The highest levels of disapproval are associated with heavy daily drinking (87% think friends would disapprove), trying LSD (88%), and trying an amphetamine (76%). Presumably, if heroin were on the list it would receive the highest peer disapproval; and, judging from respondents' own attitudes, barbiturates and cocaine would be roughly as unpopular among peers as amphetamines.

- A substantial majority think their friends would disapprove if they smoked marijuana regularly (75%), or smoked a pack or more of cigarettes daily (70%).

- While heavy drinking on weekends is judged by half (51%), to be disapproved by their friends, most (72%) think sustained daily consumption of one or two drinks would be disapproved.

- Over half (57%) feel that friends would disapprove of occasional marijuana smoking and only slightly fewer (50%) feel their friends would disapprove trying marijuana once or twice.

- In sum, peer norms differ considerably for the various drugs and for varying degrees of involvement with those drugs, but overall they tend to be quite conservative. The great majority of seniors have friendship circles which do not condone use of the illicit drugs other than marijuana, and three-fourths feel that their friends would disapprove of regular marijuana use. In fact, half of them now believe their friends would disapprove their even trying marijuana.

A Comparison of the Attitudes of Parents, Peers, and Respondents Themselves

- A comparison of the perceptions of friends' disapproval with perceptions of parents' disapproval shows several interesting things.

- First there is rather little variability among different students in their perceptions of their parents' attitudes: on any of the drug behaviors listed nearly all say their parents would disapprove. Nor is there much variability among the different drugs in perceived parental attitudes. Peer norms vary much more from drug to drug. The net effect of these facts is likely to be that peer norms have a much greater chance of explaining variability in the respondent's own individual attitudes or use than parental norms, simply because the peer norms vary more.

- Despite there being less variability in parental attitudes, the ordering of drug use behaviors is much the same for them as for peers (e.g., among the illicit drugs asked about, the highest frequencies of perceived disapproval are for trying LSD, while the lowest frequencies are for trying marijuana).

- A comparison with the seniors' own attitudes regarding drug use (see Figures O and P) reveals that on the average they are much more in accord with their peers than with their parents. The differences between seniors' own disapproval ratings and those attributed to their parents tend to be large, with parents seen as more conservative overall in relation to every drug, licit or illicit. The largest difference occurs in the case of marijuana experimentation, where only 46% say they disapprove but 85% said their parents would in 1979.

Trends in Perceptions of Parents' and Friends' Views

- Several important changes in the perceived attitudes of others have been taking place recently—and particularly among peers. These shifts are presented graphically in Figures O and P. As can be seen in those figures, adjusted (dotted) trend lines have been introduced before 1980. This was done because we discovered that the deletion in 1980 of the questions about parents' attitudes—which up until then had immediately preceded friends' attitudes in the questionnaire—removed an artifactual depression of the answers on friends' use, a phenomenon known as a question-context effect. This effect was particularly evident in the trend lines dealing with alcohol use, where an abrupt upward shift occurred in 1980 in otherwise smooth lines. It appears that when questions about parents' attitudes were present, respondents tended to understate peer disapproval in order to emphasize the difference in attitudes between their parents and their peers. In the adjusted lines, we have attempted to correct for that artifactual depression in the 1975, 1977, and 1979 scores.* We think the adjusted trend lines give a more accurate picture of the change taking place. For some reason, the question-context effect seems to have more influence on the questions dealing with cigarettes and alcohol than on those dealing with illicit drugs.

- For each level of marijuana use—trying once or twice, occasional use, regular use—there had been a drop in perceived disapproval for both parents and friends up until 1977 or 1978. We know from our other findings that these perceptions correctly reflected actual shifts in the attitudes of their peer groups—that is, that acceptance of marijuana was in fact increasing among seniors (see Figure O). There is little reason to suppose such perceptions are less accurate in reflecting shifts in parents' attitudes. Therefore, we

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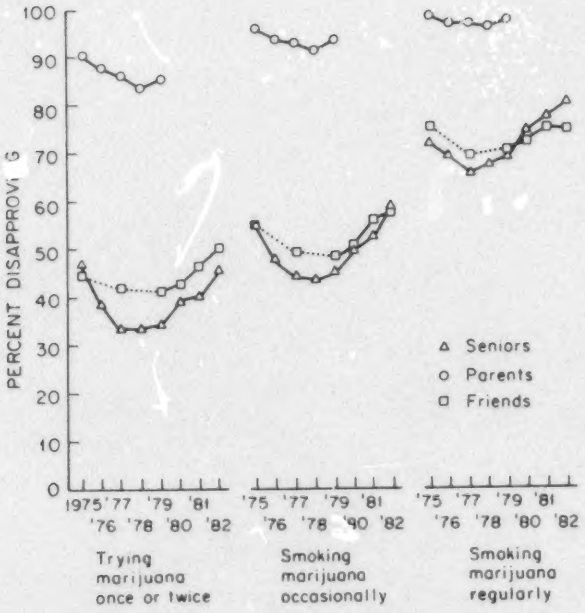
*The correction evolved as follows: We assumed that a more accurate estimate of the true change between 1979 and 1980 could be obtained by taking an average of the changes observed in the year prior and the year subsequent, rather than by taking the observed change (which we knew to contain the effect of a change in question content). We thus calculated an adjusted 1979-1980 change score by taking an average of one half the 1977-1979 change score (our best estimate of the 1978-79 change) plus the 1980-1981 change score. This estimated change score was then subtracted from the observed change score for 1979-1980, the difference being our estimate of the amount by which peer disapproval of the behavior in question was being understated because of the context in which the questions occurred prior to 1980. The 1975, 1977, and 1979 observations were then adjusted upward by the amount of that correction factor. (Table 15 shows the correction factors in the first column.)

FIGURE O

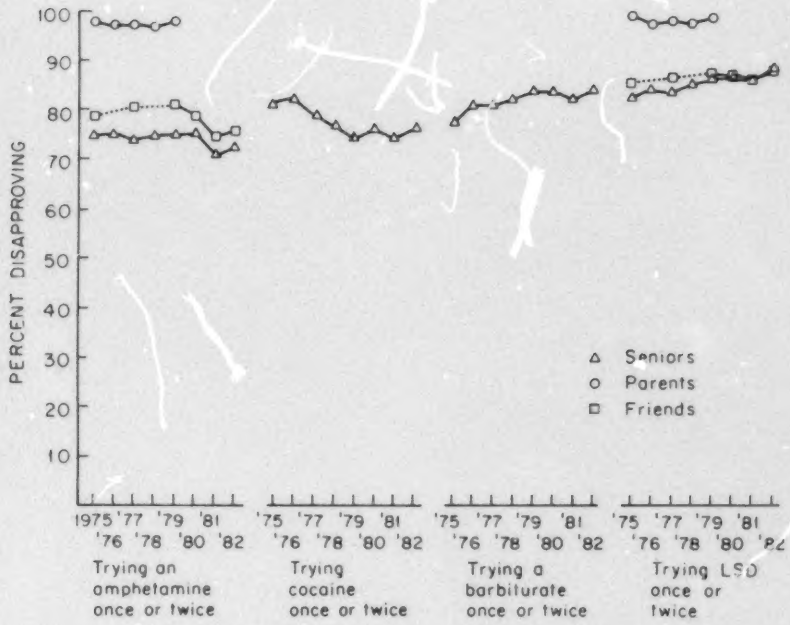
Trends in Disapproval of Illicit Drug Use
Seniors, Parents, and Peers



NOTE: Points connected by dotted lines have been adjusted because of lack of comparability of question-context among administrations. (See text for discussion.)

FIGURE O (cont.)

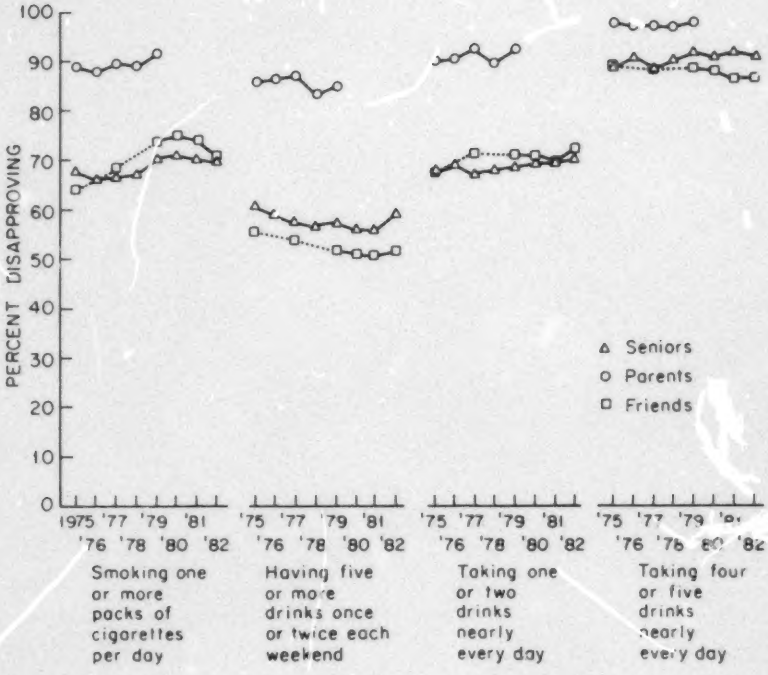
Trends in Disapproval of Illicit Drug Use
Seniors, Parents, and Peers



NOTE: Points connected by dotted lines have been adjusted because of lack of comparability of question-context among administrations. (See text for discussion.)

FIGURE P

Trends in Disapproval of Licit Drug Use
Seniors, Parents, and Peers



NOTE: Points connected by dotted lines have been adjusted because of lack of comparability of question-context among administrations. (See text for discussion.)

conclude that the social norms regarding marijuana use among adolescents had been relaxing. However, consistent with the seniors' reports about their own attitudes, the liberal shift in these social norms has sharply reversed in the last several years, especially among peers.

- Until 1981 there had been relatively little change in either self-reported or perceived peer attitudes toward amphetamine use, but in 1981 both measures showed significant and parallel drops in disapproval (as use rose sharply). This year both have leveled again, as did use.

- Perceived parental norms regarding most drugs other than marijuana showed little or no change (between 1975 and 1979, where data are available); peer norms for LSD have been quite stable since 1975.

- Certainly one of the largest changes in perceived peer norms has occurred in relation to regular cigarette smoking. The proportion of seniors saying that their friends would disapprove of them smoking a pack-a-day or more rose from 64% (adjusted version) in 1975 to 74% in 1980. Last year, however, there was no further change in seniors' perceptions of peer disapproval for smoking, and this year it appears that peer norms may be softening on cigarette use, with perceived disapproval dropping to 70%.

- For alcohol, perceived peer norms have moved pretty much in parallel with seniors' own statements of disapproval. Heavy daily drinking is seen as remaining disapproved by the great majority. Weekend binge drinking showed some modest decline in disapproval up through 1980. Since then it has remained level. (Although self-reported attitudes showed an increase in disapproval for binge drinking this year, there was not as large an increase in reports that friends would disapprove.)

Exposure to Drug Use by Friends and Others

It is generally agreed that much of youthful drug use is initiated through a peer social-learning process; and research has shown a high correlation between an individual's illicit drug use and that of his or her friends. Such a correlation can, and probably does, reflect several different causal patterns: (a) a person with friends who use a drug will be more likely to try the drug; (b) conversely, the individual who is already using a drug will be likely to introduce friends to the experience; and (c) one who is already a user is more likely to establish friendships with others who also are users.

Given the potential importance of exposure to drug use by others, we felt it would be useful to monitor seniors' association with others taking drugs, as well as seniors' perceptions about the extent to which their friends use drugs. Two sets of questions, each covering all or nearly all of the categories of drug use treated in this report, asked seniors to indicate (a) how often during the past twelve months they were around people taking each of the drugs to get high or for "kicks," and (b) what proportion of their own friends use each of the drugs. (The questions dealing with friends' use are shown in Table 16. The data dealing with direct exposure to use may be found in Table 17.) Obviously, responses to these two questions are highly correlated with the respondents' own drug use; thus, for example, seniors who have recently used marijuana are much more likely to report that they have been around others getting high on marijuana, and that most of their friends use it.

Exposure to Drug Use in 1982

- A comparison of responses about friends' use, and about being around people in the last twelve months who were using various drugs to get high, reveals a high degree of correspondence between these two indicators of exposure. For each drug, the proportion of respondents saying "none" of their friends use it is fairly close to the proportion who say that during the last twelve months they have not been around anyone who was using that drug to get high. Similarly, the proportion saying they are "often" around people getting high on a given drug is roughly the same as the proportion reporting that "most" or "all" of their friends use that drug.

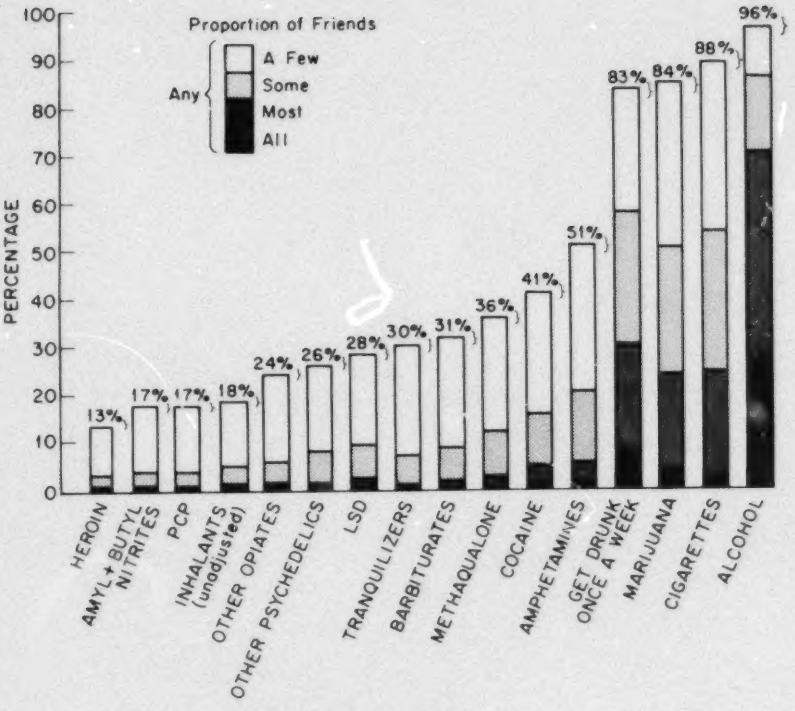
- Reports of exposure and friends' use closely parallel the figures on seniors' own use (compare Figures A and Q). It thus comes as no surprise that the highest levels of exposure involve alcohol; a majority (59%) say they are "often" around people using it to get high. What may come as a surprise is that fully 30% of all seniors say that most or all of their friends go so far as to get drunk at least once a week. (This is consistent, however, with the fact that 41% said they personally had taken five or more drinks in a row at least once during the prior two weeks.)

- The drug to which students are next most frequently exposed is marijuana. Some 28% are "often" around people using it to get high, and another 27% are exposed "occasionally." Only 22% report no exposure during the year.

- Amphetamines, the most widely used class of illicit drugs other than marijuana, is also the one to which seniors are next most often exposed. About half of all seniors (50%) have been around someone using them to get high over the past year, and 12% say they are "often" around people doing this.

FIGURE Q

Proportion of Friends Using Each Drug as Estimated by Seniors, in 1982



- For the remaining illicit drugs there are far lower rates, with any exposure to use in the past year ranging from 35% for cocaine, down to 7% for heroin.

Recent Trends in Exposure to Drug Use

- During the two-year interval from 1976 to 1978, seniors' reports of exposure to marijuana use increased in just about the same proportion as percentages on actual monthly use. In 1979 both exposure to use and actual use stabilized; and since 1979 both have been dropping. The proportion saying they are often around people using marijuana dropped from 39% to 33% between 1979 and 1981, and this year dropped another full 5% (to 28%).

- Cocaine had a consistent increase from 1976 to 1979 in the proportions exposed to users. Since 1979, however, both exposure and use have remained fairly stable.

- Over the last three years there have been statistically significant decreases in exposure to others using tranquilizers, and psychedelics other than LSD (including PCP) which coincide with continued declines in the self-reported use of these classes of drugs.

- There also had been a gradual decrease in exposure to barbiturates and LSD through 1980. However, exposure to the use of both of these drugs remained virtually unchanged last year, as did the usage figures. Both drugs show some further decline in use in 1982, but only LSD resumed its gradual decline in exposure in 1982, with no further drop in exposure to barbiturate use observed.

- Trend data are only available since 1979 on friends' use of PCP or the nitrites. For both drugs, exposure to friends' use has dropped significantly between 1979 and 1981. Nearly 11% fewer seniors in 1981 (17%) said any of their friends used PCP than said that in 1979 (28%). The comparable drop for nitrites was from 22% to 17%. This year, however, both declines in exposure halted, even though the actual use of both drugs continued downward.

- The proportion having some friends who used amphetamines rose some 5% last year on top of a 3% rise the year before—paralleling the sharp increase in reported use over that period. The proportion saying they were around people using amphetamines "to get high or for kicks" has also changed sharply,

TABLE 16

Trends in Proportions of Friends Using Drugs

(Entries are percentages)

How many of your friends would you estimate...	Class of 1975	Class of 1976	Class of 1977	Class of 1978	Class of 1979	Class of 1980	Class of 1981	Class of 1982	'81-'82 change
Smoke marijuana									
% saying none	17.0	17.1	14.1	13.9	12.4	13.6	17.0	15.6	-1.4
% saying most or all	30.3	30.6	32.3	35.3	35.5	31.3	27.7	23.8	-3.9ss
Use inhalants									
% saying none	75.7	81.4	81.1	80.0	80.9	82.2	83.5	81.6	-1.9
% saying most or all	1.1	1.1	1.0	1.1	1.1	1.2	0.9	1.3	+0.4
Use nitrites									
% saying none	NA	NA	NA	NA	78.4	81.0	82.6	82.5	-0.1
% saying most or all	NA	NA	NA	NA	1.9	1.3	1.2	0.9	-0.3
Take LSD									
% saying none	63.5	69.4	68.1	70.1	71.1	71.9	71.5	72.2	+0.7
% saying most or all	2.7	2.8	3.0	2.0	1.9	1.8	2.2	2.4	+0.2
Take other psychedelics									
% saying none	58.8	69.7	68.6	70.8	71.8	71.8	73.7	74.4	+0.7
% saying most or all	4.7	3.0	2.8	2.0	2.2	2.2	2.1	1.9	-0.2
Take PCP									
% saying none	NA	NA	NA	NA	72.2	77.8	82.8	82.7	-0.1
% saying most or all	NA	NA	NA	NA	1.7	1.6	0.9	9.9	0.0
Take cocaine									
% saying none	66.4	71.2	69.9	66.8	61.1	58.4	59.9	59.3	-0.6
% saying most or all	3.4	3.2	3.6	4.0	6.0	6.1	6.3	4.9	-1.4s
Take heroin									
% saying none	84.8	86.4	87.1	85.7	87.1	87.0	87.5	86.8	-0.7
% saying most or all	0.7	0.8	0.7	0.9	0.5	1.0	0.5	0.7	+0.2
Take other narcotics									
% saying none	71.2	75.9	76.3	76.8	76.9	77.6	76.9	76.1	-0.8
% saying most or all	2.1	2.2	1.7	1.4	1.5	1.7	1.5	1.4	-0.1
Take amphetamines									
% saying none	49.0	57.8	58.7	59.3	59.3	56.1	51.2	49.4	-1.8
% saying most or all	5.9	5.6	4.1	4.7	4.3	4.8	6.4	5.4	-1.0
Take barbiturates									
% saying none	55.0	63.7	65.3	67.5	69.3	69.5	68.9	68.7	-0.2
% saying most or all	4.3	3.5	3.0	2.3	2.1	2.6	2.1	1.8	-0.3

(Table continued on next page)

TABLE 16 (cont.)

Trends in Proportions of Friends Using Drugs

(Entries are percentages)

Q. *How many of your friends would you estimate...*	Class of 1975	Class of 1976	Class of 1977	Class of 1978	Class of 1979	Class of 1980	Class of 1981	Class of 1982	'81-'82 change
Take quaaludes									
% saying none	68.3	73.0	71.7	73.0	72.3	67.5	65.0	64.5	-0.5
% saying most or all	3.0	1.8	2.9	2.2	2.8	3.6	3.6	2.6	-1.0
Take tranquilizers									
% saying none	54.4	63.7	62.2	65.2	68.0	70.3	70.5	70.1	-0.4
% saying most or all	3.5	3.1	2.7	1.8	2.0	1.9	1.4	1.1	-0.3
Drink alcoholic beverages									
% saying none	3.3	4.9	5.6	5.1	4.6	3.9	5.3	4.3	-1.0
% saying most or all	68.4	64.7	66.2	68.9	68.5	68.9	67.7	69.7	+2.0
Get drunk at least once a week									
% saying none	17.6	19.3	19.0	18.0	16.7	16.9	18.2	16.9	-1.3
% saying most or all	30.1	26.6	27.6	30.2	32.0	30.1	29.4	29.9	+0.5
Smoke cigarettes									
% saying none	4.8	6.3	6.3	6.9	7.9	9.4	11.5	11.7	+0.2
% saying most or all	41.5	36.7	33.9	32.2	28.6	23.3	22.4	24.1	+1.7
Approx. N =	(7640)	(2929)	(3184)	(3247)	(2933)	(2987)	(3307)	(3303)	

NOTES: Level of significance of difference between the two most recent classes:
s = .05, ss = .01, sss = .001.

NA indicates data not available.

TABLE 17

Trends in Exposure to Drug Use

(Entries are percentages)

2. During the LAST 12 MONTHS how often have you been around people who were taking each of the following to get high or for "kicks"?	Class of 1975	Class of 1976	Class of 1977	Class of 1978	Class of 1979	Class of 1980	Class of 1981	Class of 1982	'81-'82 change
Marijuana									
% saying not at all	NA	20.5	19.0	17.3	17.0	18.0	19.8	22.1	+2.3
% saying often	NA	32.5	37.0	39.0	38.9	33.8	33.1	28.0	-5.1sss
LSD									
% saying not at all	NA	78.8	80.0	81.9	81.9	82.8	82.6	83.9	+1.3
% saying often	NA	2.2	2.0	1.8	2.0	1.4	2.0	1.9	-0.1
Other psychedelics									
% saying not at all	NA	76.5	76.7	76.7	77.6	79.6	82.4	83.2	+0.8
% saying often	NA	3.1	3.2	2.9	2.2	2.2	2.0	2.6	+0.6
Cocaine									
% saying not at all	NA	77.0	73.4	69.8	64.0	62.3	63.7	65.1	+1.4
% saying often	NA	3.0	3.7	4.6	6.8	5.9	6.6	6.6	0.0
Heroin									
% saying not at all	NA	91.4	90.3	91.8	92.4	92.6	93.4	92.9	-0.5
% saying often	NA	0.8	1.1	0.9	0.7	0.4	0.6	1.0	+0.4
Other narcotics									
% saying not at all	NA	81.9	81.3	81.8	82.0	80.4	82.5	81.5	-1.0
% saying often	NA	1.8	2.4	2.0	1.7	1.7	1.7	2.4	+0.7
Amphetamines									
% saying not at all	NA	59.6	60.3	60.9	58.1	59.2	50.5	49.8	-0.7
% saying often	NA	6.8	7.9	6.7	7.4	8.3	12.1	12.3	+0.2
Barbiturates									
% saying not at all	NA	69.0	70.0	73.5	73.6	74.8	74.1	74.3	+0.2
% saying often	NA	4.5	5.0	3.4	3.3	3.4	4.0	4.3	+0.3
Tranquilizers									
% saying not at all	NA	67.7	66.0	67.5	67.5	70.9	71.0	73.4	+2.4
% saying often	NA	5.5	6.3	4.9	4.3	3.2	4.2	3.5	-0.7
Alcoholic beverages									
% saying not at all	NA	6.0	5.6	5.3	5.2	5.3	6.0	6.0	0.0
% saying often	NA	57.1	60.8	60.8	61.2	60.2	61.0	59.3	-1.7
Approx. N =	(NA)	(3249)	(3579)	(3682)	(3253)	(3259)	(3608)	(3645)	

NOTES: Level of significance of difference between the two most recent classes:
s = .05, ss = .01, sss = .001.

NA indicates data not available.

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particularly last year.* This year, however, there was little further change in either annual use or exposure to use.

- Between 1978 and 1980 methaqualone use rose, as did the proportion of seniors saying some of their friends used. Since then use has leveled (and perhaps started to decline), as has the trend in friends' use.

- The proportion saying that "most or all" of their friends smoke cigarettes dropped steadily between 1976 and 1981, from 37% to 22%. (During this period actual use dropped markedly, and more seniors perceived their friends as disapproving regular smoking.) In 1982, though, there was a slight rise (to 24%) in the proportion saying most or all of their friends smoke (as well as in self-reported use).

- The proportion saying most or all of their friends get drunk at least once a week had been increasing steadily, from 27% in 1976 to 32% in 1979—a period when prevelance was rising. It declined slightly to 30% over the past three years—an interval in which the frequency of self-reported binge drinking has also shown evidence of beginning to decline.

Implications for Validity of Self-Reported Usage Questions

- We have noted a high degree of correspondence in the aggregate level data presented in this report among seniors' self-reports of their own drug use, their reports concerning friends' use, and their own exposure to use. Drug-to-drug comparisons in any given year across these three types of measures tend to be highly parallel, as do the changes from year to year.** We take this consistency as additional evidence for the validity of the self-report data, since there should be less reason to distort answers on friends' use, or general exposure to use, than to distort the reporting of one's own use.

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*This latter finding was imporant, since it indicated that a substantial part of the increase observed in self-reported amphetamine use was due to things other than simply an increase in the use of over-the-counter diet pills or stay-awake pills, which presumably are not used to get high. Obviously more young people were using stimulants for recreational purposes. There still remained the question, of course, of whether the active ingredients in those stimulants really were amphetamines.

** Those minor instances of non-correspondence may well result from the larger sampling errors in our estimates of these environmental variables, which are measured on a sample size one-fifth the size of the self-reported usage measures.

Perceived Availability of Drugs

One set of questions asks for estimates of how difficult it would be to obtain each of a number of different drugs. The answers range across five categories from "probably impossible" to "very easy." While no systematic effort has been undertaken to assess the validity of these measures, it must be said that they do have a rather high level of face validity—particularly if it is the subjective reality of "perceived availability" which is purported to be measured. It also seems quite reasonable to us to assume that perceived availability tracks actual availability to some extent.

Perceived Availability in 1982

- There are substantial differences in the reported availability of the various drugs. In general, the more widely used drugs are reported to be available by the highest proportion of the age group, as would be expected (see Table 18 and Figure R).

- Marijuana appears to be almost universally available to high school seniors; nearly 90% report that they think it would be "very easy" or "fairly easy" for them to get—roughly 30% more than the number who report ever having used it.

- After marijuana, the students indicate that the psychotherapeutic drugs are the most available to them: amphetamines are seen as available by 71%, tranquilizers by 59%, and barbiturates by 55%.

- Nearly half of the seniors (47%) now see cocaine as available to them.

- LSD, other psychedelics, and opiates other than heroin are reported as available by only about one of every three seniors (34%, 31%, and 30%, respectively).

- Heroin is seen by the fewest seniors (21%) as being fairly easy to get.

- The majority of "recent users" of all drugs—those who have illicitly used the drug in the past year—feel that it would be fairly easy for them to get that same type of drug. (Data not shown here.)

- There is some variation by drug class, however. Most (from 83% to 98%) of the recent users of marijuana, cocaine, amphetamines, and barbiturates feel they could get those same drugs fairly easily. Smaller majorities of those who used tranquilizers (72%), LSD (78%) or other opiates (64%) feel it would be fairly easy for them to get those drugs again. And, of the recent users of heroin, only about half (52%) think it would be fairly easy to get some more.

TABLE 18

Trends in Reported Availability of Drugs

	Percent saying drug would be "Fairly easy" or "Very easy" for them to get[a]								
	Class of 1975	Class of 1976	Class of 1977	Class of 1978	Class of 1979	Class of 1980	Class of 1981	Class of 1982	'81-'82 change
Marijuana	87.8	87.4	87.9	87.8	90.1	89.0	89.2	88.5	-0.7
LSD	46.2	37.4	34.5	32.2	34.2	35.3	35.0	34.2	-0.8
Some other psychedelic	47.8	35.7	33.8	33.8	34.6	35.0	32.7	30.6	-2.1
Cocaine	37.0	34.0	33.0	37.8	45.5	47.9	47.5	47.4	-0.1
Heroin	24.2	18.4	17.9	16.4	18.9	21.2	19.2	20.8	+1.6
Some other narcotic (including methadone)	34.5	26.9	27.8	26.1	28.7	29.4	29.6	30.4	+0.8
Amphetamines	67.8	61.8	58.1	58.5	59.9	61.3	69.5	70.8	+1.3
Barbiturates	60.0	54.4	52.4	50.6	49.8	49.1	54.9	55.2	+0.3
Tranquilizers	71.8	65.5	64.9	64.3	61.4	59.1	60.8	58.9	-1.9
Approx. N =	(2627)	(3163)	(3362)	(3598)	(3172)	(3240)	(3578)	(3602)	

NOTE: Level of significance of difference between the two most recent classes:
s = .05, ss = .01, sss = .001.

[a]Answer alternatives were: (1) Probably impossible, (2) Very difficult, (3) Fairly difficult, (4) Fairly easy, and (5) Very easy.

Trends in Perceived Availability

- This year there are no major changes in the perceived availability of any of these drugs.

- Last year amphetamines showed a full 8% jump (to 70%) in the number of all seniors who thought they could get some fairly easily if they wanted them; but this year there was only a 1% further increase.

- The perceived availability of barbiturates also jumped nearly 6% last year, but unlike amphetamines was not accompanied by any increase in actual use. This year there was no further increase in perceived availability.

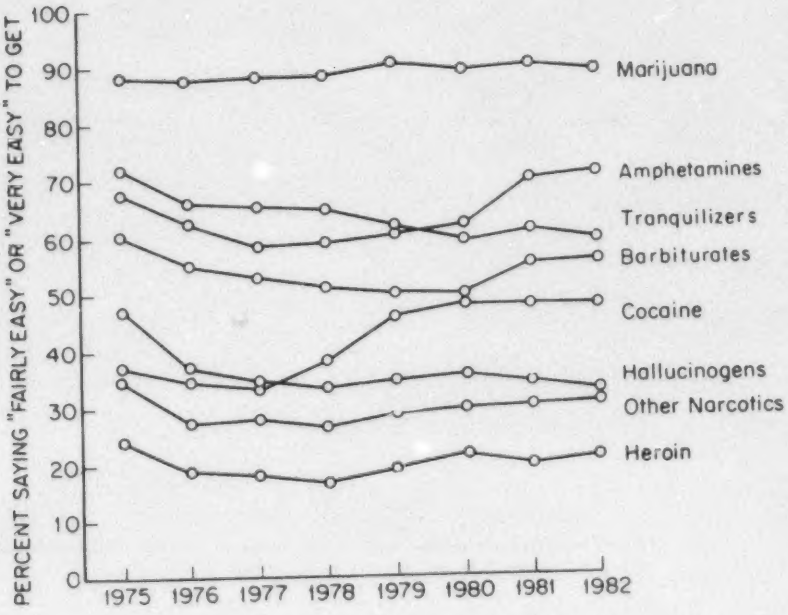
- Perceptions of marijuana availability have remained quite steady across the last six high school classes (at between 87% and 90% of the entire sample).

- Between 1977 and 1980 there had been a substantial (15%) increase in the perceived availability of cocaine (see Figure R and Table 18). Among recent cocaine users there also was a substantial increase observed over that three year interval (data not shown). There was no further change since 1980, however, either among all seniors or among recent users.

- The availability of tranquilizers has held steady since 1980, after a long period of gradual decline.

FIGURE R

Trends in Perceived Availability of Drugs



OTHER FINDINGS FROM THE STUDY

Each year we present additional recent findings from the Monitoring the Future study in this section. Sometimes these have been published elsewhere; however, the two sections included here are being presented for the first time.

The Use of Non-Prescription Stimulants

As is discussed elsewhere in this report, between 1979 and 1981 we observed a substantial increase in reported stimulant use by high school students. We had reason to believe that a fair part of that increase was attributable to non-prescription stimulants of two general types—"look-alike" drugs (pseudo-amphetamines, usually sold by mail order, which look like, and have names which sound like, real amphetamines) and over-the-counter stimulants (primarily diet pills and stay-awake pills). These drugs usually contain caffeine, ephedrine, and/or phenylpropanolamine as their active ingredients.

In the 1982 survey we introduced new questions on some questionnaire forms in order to more accurately assess the use of amphetamines as well as to assess the use of the "look-alikes," diet pills, and stay-awake pills of the non-prescription variety. For example, on one of the five questionnaire forms respondents were asked to indicate on how many occasions (if any) they had taken non-prescription diet pills such as Dietac, Dexatrim, and Prolamine (a) in their lifetime, (b) in the prior twelve months, and (c) in the prior thirty days. (These correspond to the standard usage questions asked for all drugs.) Similar questions were asked about non-prescription stay-awake pills (such as No-Doz, Vivarin, Wake, and Caffedrine) and "look-alike" stimulants. (The latter were described at some length in the actual question.)

On three of the five questionnaire forms respondents were also asked about their use of prescription amphetamines, with very explicit instructions to exclude the use of over-the-counter and "look-alike" drugs. These questions yielded the data described in this volume as "stimulants, adjusted." Here we will refer to them as "amphetamines, adjusted," to distinguish them more clearly from the non-amphetamine stimulants.

Prevalence of Use in 1982

- Figure 5 gives the prevalence levels for these various classes of stimulants. As can be seen, a substantial proportion of students (30%) have used diet pills and fully 10% have used them in just the past month. Some 1.1% are using them daily.

- Almost identical proportions are using actual amphetamines (adjusted): 28% lifetime, 11% monthly, and 0.7% daily prevalence.

- Only about half as many students are knowingly using the "look-alikes" as are using diet pills or amphetamines (adjusted): 15% lifetime, 6% monthly, and 0.6% daily prevalence. Of course, it is probable that some proportion of those who think they are getting real amphetamines have actually been sold "look-alikes," which are far cheaper for drug dealers to purchase.

- Stay-awake pills have also been used by a fair number of students: 19% lifetime, 6% monthly, and 0.3% daily prevalence.

- The revised questions on amphetamine use yielded prevalence estimates in 1982 which were about one-fifth lower than the original version of the question, indicating that the distortion in the recent unadjusted estimates was limited.

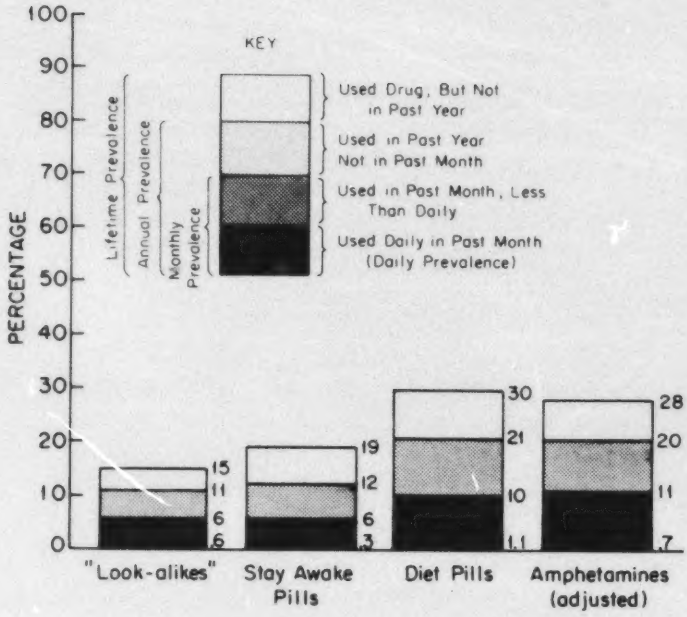
Trends in Use

- Because these questions are new in 1982, no trends can be directly assessed.

- However, it is worth noting that the 1982 figures for amphetamines (adjusted) are higher than the unadjusted figures for all years prior to 1981. (See Tables 6 through 9.) This suggests that there was indeed an increase in amphetamine use between 1979 and 1981—or at least an increase in what, to the best of the respondent's knowledge, were amphetamines.

FIGURE 5

Prevalence and Recency of Use
Amphetamines and Non-Prescription Stimulants, Class of 1982



Subgroup Differences

- Figure T shows the prevalence figures for these drug classes for males and females separately. It can be seen that the use of diet pills is dramatically higher among females than among males. In fact, the absolute prevalence levels for females are impressively high, with some 42% reporting some experience with them and 14%—or one in every seven females—reporting use in just the last month. For all other stimulants the prevalence rates for both sexes are extremely close.

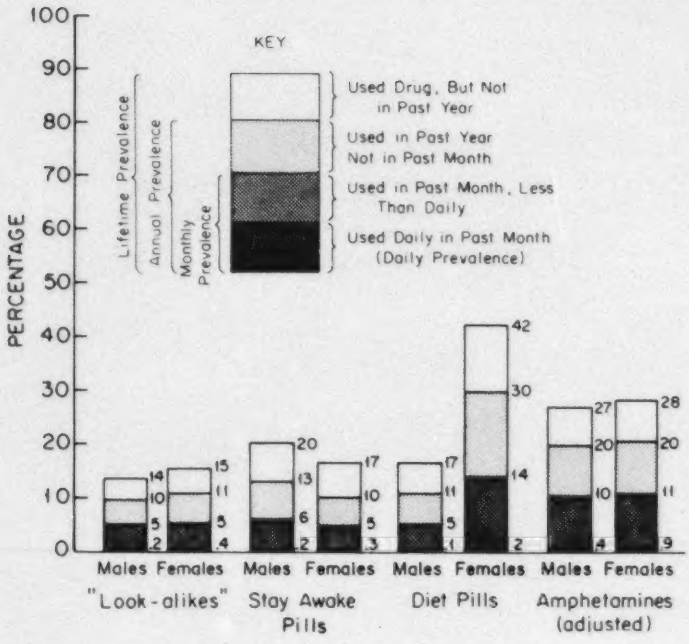
- A similar comparison for those planning four years of college (referred to here as the "college-bound"),and those who are not, shows some sizeable differences as well (data not shown). As is true for the controlled substances, use of the non-prescription stimulants is lower among the college-bound. For example, the annual prevalence figures for the college-bound vs. the non-college-bound respectively are: 18% vs. 23% for diet pills, 10% vs. 11% for the stay-awake pills, and 7% vs. 14% for the "look-alikes".

- There are not any dramatic regional differences in the use of the non-prescription stimulants, although the North Central region does tend to have the highest levels, particularly for "look-alike" use (data not shown). The annual prevalence for the "look-alikes" is 15% in the North Central vs. 10% in the South, 9% in the Northeast, and only 7% in the West.

- The use of all of the non-prescription stimulants (i.e. diet pills, stay awake pills, and "look-alikes") is substantially higher among those who have had experience with the use of illicit drugs than among those who have not, and highest among those who have become most involved with illicit drugs (data not shown). Less than 1% (0.6%) of those who have abstained from any illicit drug use report ever using a "look-alike" stimulant.

FIGURE T

Prevalence and Recency of Use, by Sex
Amphetamines and Non-Prescription Stimulants, Class of 1982



The Use of Marijuana on a Daily Basis

In the past two reports in this series, we summarized a number of findings regarding daily marijuana users, including what kind of people they are, how use changes after high school for different subgroups, and what daily users see to be the negative consequences of their use.* In 1982 a special question segment was introduced into the study in one of the five questionnaire forms in order to secure more detailed measurement of individual patterns of daily use. More specifically, respondents were asked (a) whether if at any time during their lives they had ever used marijuana on a daily or near-daily basis for at least a month and, if so, (b) how recently they had done that, (c) when they first had done it and (d) how many total months they had smoked marijuana daily, cumulating over their whole lifetime.

Lifetime Prevalence of Daily Use

- Current daily use, defined as use on twenty or more occasions in the past thirty days, has been fluctuating widely over the past seven years, as we know from the trend data presented earlier in this report. It rose from 6.0% among seniors in 1975 to 10.7% in 1978, then back down to 6.3% in 1982.

- For the Class of 1982, at least, lifetime prevalence of daily use is far higher—at 20.3% or one in every five seniors. In other words, the proportion who describe themselves as having been daily or near-daily users at sometime in their lives, is more than three times as high as the number of current daily users. However, we believe it very likely that this ratio has changed dramatically over the life of the study as a result of the large secular trends in daily use. Therefore, it would be inaccurate to extrapolate to the Class of 1978, for example, and deduce that their lifetime prevalence of daily use was three times their 10.7% current use figure. (An investigation of data from a follow-up panel of the Class of 1978 confirms this assertion.)

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*For the original reports see the following, which are available from the author: L. Johnston, "The Daily Marijuana User," paper delivered at the first annual meeting of the National Alcohol and Drug Coalition, Washington, D.C. September 18, 1980; and L. Johnston, "A review and Analysis of Recent Changes in Marijuana Use by American Young People" and "Frequent Marijuana Use: Correlates, possible effects, and reasons for using and quitting," papers delivered to conferences of the American Council on Marijuana on December 4 and May 4, 1981, respectively.

Utilizing data collected in 1982 from follow-up panels from the earlier graduating classes of 1976 through 1981, we find that the lifetime prevalence of daily marijuana use for these recent graduates (ranging in age from about 19 to 24) is 24%.

Grade of First Daily Use

- Of those who were daily users at some time, more than half (64%, or 13% of all seniors) began that pattern of use before tenth grade. However, the secular trends in daily use must be recalled. Active daily use reached its peak among seniors in 1978, when this 1982 graduating class was in eighth grade. Other classes may show quite different age-associated patterns.

- By the end of grade ten nearly all who were to become daily users had done so (84% of the eventual daily users). The percentages of all daily users who started use in each grade level is presented in Table 19.

Recency of Daily Use

- The majority (61%) of those who report ever having been daily marijuana users (for at least a one month interval) have smoked that frequently in just the past year to year-and-a-half, while 39% of them say they last used that frequently "about two years ago" or longer. On the other hand, only 20.9% of all users (or 4.2% of the entire sample) say they have used daily or almost daily in the past month (the period for which we define current daily users). The fact that only 4.2% of the entire sample report themselves to be current daily users, versus the 6.3% estimate given earlier in this report, suggests that the students have a more stringent definition of "daily or near-daily use" than the operational one used in this report (i.e., use on twenty or more occasions during the past month). If this is indeed the case, then perhaps the proportion of seniors who would fit our operational definition of daily use at sometime in their lives is even higher than the 20% figure yielded by the students' own intuitive definitions.

Duration of Daily Use

- It seems likely that the most serious long-term health consequences associated with marijuana use will be directly related to the duration of heavy use. Thus a question was introduced which asks the cumulative number of months the student has smoked marijuana

daily or nearly daily. While hardly an adequate measure of the many different possible cross-time patterns of use—a number of which may eventually prove to be important—it does provide a gross measure of the total length of exposure to heavy use.

- Table 19 gives the distribution of answers to this question. It shows that almost two-thirds (64%) of those with daily use experience have used "about one year" or less cumulatively—at least by the end of twelfth grade. In fact, over one-third (34%) have used less than three months cumulatively.

- On the other hand, about one-fourth (28%, or 5.6% of all seniors) have used "about two years" or more on a daily or near-daily basis.

Subgroup Differences

- Surprisingly, there is rather little sex-difference in the proportion having ever been a daily user—20% for males and 18% for females—nor is there a great deal of difference in age at onset for those users, although the females did tend to be slightly older on the average. However, among the daily users, the cumulative duration of use tends to be distinctly shorter for the females, which accounts for the large male-female difference in current daily use.

- Whether or not the student has college plans is strongly related to lifetime prevalence of daily use, as well as to current prevalence. Of those planning four years of college, 14% had used daily compared with 22% of those without such plans. And the college-bound users show a distinctly shorter cumulative duration of use, with a lower proportion of them still using daily. Nevertheless, among those in each group who did use daily, the age-at-onset pattern is just about the same.

- There are some large regional differences in lifetime prevalence of daily use, all consistent with those found for current daily use. The Northeast is highest, with 25% having used daily at some time, the South lowest with 16%, and the West and North Central in the middle—both at 21%. Among users, the average duration of use tends to be lowest in the South, as well.

- The subgroup differences associated with urbanicity are likewise similar to those found for current daily use. Lifetime prevalence of daily marijuana use is 24% in the large cities, 20% in the smaller cities, and 18% in the non-urban areas.

TABLE 19

Responses to Selected Questions on Daily Marijuana Use by Subgroup

	Total	Sex		4-year college plans		Region				Urbanicity		
		M	F	Yes	No	NE	NC	S	W	Large urban	Other urban	Non-urban
How old were you when you first smoked marijuana or hashish that frequently?												
Grade 6 or earlier	1.3	1.9	0.7	0.6	1.0	1.5	1.3	0.7	2.5	2.1	1.1	1.0
Grade 7 or 8	5.9	6.2	4.4	3.8	5.9	8.2	5.7	4.1	5.3	6.0	5.8	5.6
Grade 9 (Freshman)	5.6	5.1	5.8	3.6	7.1	7.1	6.3	3.9	4.8	7.1	5.2	4.8
Grade 10 (Sophomore)	4.2	3.9	3.7	2.9	4.6	4.4	4.5	3.0	5.0	4.4	4.3	3.5
Grade 11 (Junior)	2.2	2.2	1.8	2.1	2.1	2.0	2.4	2.3	2.0	2.3	2.1	2.0
Grade 12 (Senior)	1.0	0.9	1.0	0.5	1.4	1.3	0.6	1.0	1.1	1.1	1.2	0.6
Never used daily	79.7	80.3	82.5	86.5	77.9	73.5	79.2	84.9	79.3	76.7	80.2	82.5
N =	(3393)	(1697)	(1727)	(1775)	(1396)	(903)	(1078)	(1090)	(522)	(955)	(1476)	(1162)
How recently did you use marijuana or hashish on a daily, or almost daily, basis for at least a month?												
During the past month	4.2	5.0	2.6	2.0	5.0	5.3	4.8	3.0	2.8	5.5	4.2	2.8
2 months ago	1.2	1.2	0.8	0.7	1.2	1.5	0.8	1.2	1.5	1.3	1.2	1.1
3 to 9 months ago	3.4	3.6	2.9	2.4	4.3	3.1	4.0	2.8	3.5	3.4	3.9	2.5
About 1 year ago	3.5	2.9	3.4	2.7	3.2	4.8	2.9	2.5	3.6	4.3	3.0	3.1
About 2 years ago	4.0	3.1	4.2	2.7	4.6	5.2	4.5	2.4	3.4	4.2	3.6	3.9
3 or more years ago	3.9	3.4	3.5	3.0	3.7	4.2	3.6	3.0	5.4	3.8	3.9	3.8
Never used daily	79.7	80.7	82.6	86.6	78.0	75.9	79.4	85.1	79.7	77.4	80.1	82.9
N =	(3581)	(1690)	(1724)	(1772)	(1394)	(898)	(1076)	(1088)	(519)	(947)	(1478)	(1157)
Over your whole lifetime, during how many months have you used marijuana or hashish on a daily or near-daily basis?												
Less than 3 months	6.9	6.5	6.5	6.1	6.5	7.8	6.1	5.5	8.7	7.4	6.9	5.8
3 to 9 months	4.0	3.4	3.9	2.5	4.8	4.6	4.3	3.4	3.3	4.2	3.9	3.8
About 1 year	2.1	1.4	2.4	1.1	3.0	2.3	2.5	0.9	2.8	1.7	2.2	2.1
About 1 and ½ years	1.7	1.6	1.7	1.3	1.6	2.2	1.8	1.3	0.9	1.5	2.0	1.2
About 2 years	1.7	2.3	0.7	0.8	1.7	2.0	2.3	1.0	1.1	2.1	1.2	1.8
About 3 to 5 years	3.1	3.4	1.7	1.6	3.3	4.6	2.4	2.3	2.9	4.1	3.0	2.0
6 or more years	0.8	0.8	0.3	0.1	0.9	0.7	1.4	0.4	0.9	1.6	0.5	0.6
Never used daily	79.7	80.5	82.8	86.6	78.1	75.9	79.4	85.2	79.4	77.3	80.3	82.8
N =	(3581)	(1694)	(1721)	(1773)	(1392)	(899)	(1076)	(1086)	(521)	(948)	(1475)	(1158)

NOTE: Entries are percentages which sum vertically to 100%.

Other Data on Correlates and Trends

Hundreds of correlates of drug use, without accompanying interpretation, may be found in the series of annual volumes from the study entitled Monitoring the Future: Questionnaire Responses from the Nation's High School Students.* For each year since 1975, a separate hard-bound volume presents univariate and selected bivariate distributions on all questions contained in the study. Many variables dealing explicitly with drugs—variables not discussed here—are contained in that series; and bivariate tables are provided for all questions each year distributed against an index of lifetime illicit drug involvement. A special cross-time reference index is contained in each volume to facilitate locating the same question across different years. One can thus derive trend data on some 1500 to 2000 variables for the entire sample, or for important sub-groups (based on sex, race, region, college plans, or drug involvement).

*This series is available from the Publications Division, Institute for Social Research, The University of Michigan, Ann Arbor, Michigan 48109.

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